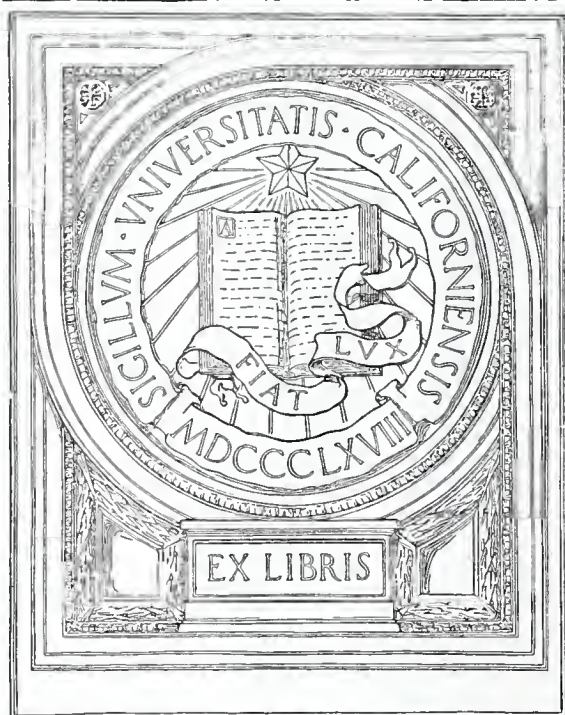



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H. T. SMITH, M. D.
McGehee
President, Arkansas Medical Society
1940-1941

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No. 1

PRESIDENTIAL ADDRESS*

A. S. BUCHANAN, M. D.

Prescott

When one develops fixed opinions regarding his profession, his progressive work ceases. Never before in medical history has it been so essential to maintain an open, alert, and critical mind and a readiness to admit that one's conclusions have been disproved by recent investigations.

The medical profession is concerned briefly with the protection of the life that is necessary to the enjoyment of benefits accruing to humanity in these enlightened times. A natural question is: Has medical science kept pace with the general advance?

Modern medicine has been established only about 75 years.

At the time of our civil war, physicians and surgeons had no clinical thermometer, no hypodermic syringe, no watches with second hands for counting the pulse, only a few crude stethoscopes. It must be a poor clinical picture that is determined without a record of pulse and temperature. Consider how much of our therapy today would be lost without resort to hypodermic medication, hypodermoclysis, intravenous infusion, and transfusion. All of these are great gifts to the science of medicine, but all are secondary to that greatest of gifts, the compound microscope.

We have had the X-ray but a generation. Acquired from the physicist, Roentgen, how avidly it was seized by the medical profession and developed to a usefulness beyond the imagination of its discoverer. At first only a diagnostic aid, it has now become a powerful therapeutic agent as well as the last word in diagnosis in many conditions.

Radium is still a more recent and an invaluable acquisition. To those martyrs who were maimed or even slain because of their devotion to X-ray,

radium and radio-therapy, our debt, though realized, can never be paid.

Modern surgery may be said to have begun about 25 years later than modern medicine; that is, in the 1880's. Anesthetics, it is true, had been in common use for some time, but infection was an almost insurmountable barrier to surgical advance. Surgery on the body surface and of the extremities was undertaken with impunity, but the body cavities, abdominal, chest and cranial, were practically left alone because of the mortality due to infection. Confirmation by the newly-acquired microscope of the "germ theory" of disease led to the development of antiseptic and aseptic technique, crude at first, but practical because it made possible the first real progress in surgery.

The medical graduate of 1900 is seen entering on his medical career with an altogether truer conception of disease than his physician-fathers could possibly have known. He can at least take the pulse of his patients, and he has proved Koch's law, that specific infection diseases are due to specific bacteria. He is aware that surgery has been highly practical, that operations of increasing magnitude can be performed safely and that new fields of surgery can be investigated because of the reduced danger of infection and improved knowledge of anesthesia. But of the X-ray he has only heard, and he has probably never seen one. The 1900 graduate has had plenty of materia medica for treatment, yet he has heard nothing of hydrogenion concentration, acidosis or alkalosis. Chemistry in his day was chiefly analytical. Today it is increasingly synthetic, with resulting new organic compounds almost without number, essentials of many diagnostic tests as well as of new therapeutics, which is rapidly minimizing the importance of the materia medica of a generation ago.

The 1900 graduate has never heard of radium. He has a scant knowledge of the gonococcus and

* Read before the First General Session, Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 15, 1940.

its propensities but none whatever of its well known social partner, the *spirocheta pallida*. Although the *bacillus typhosus* and the *pneumococcus* were described in his textbook, neither he nor his professor had yet conceived of the multiplicity of associates, the "para's" and types that even now confuse the picture of this disease. Of instruments of precision he had none, no sphygmomanometer or electrocardiograph or basal metabolism apparatus. He had been taught nothing of vaccines, of polyvalent sera, nor would he learn for years about hormones and international units. He treated his luetic cases with the time-proved mercury and iodides, but without the aid of the Wassermann, he guessed largely at the diagnosis of syphilis.

Our present generation has seen the correct classification of diseases, long known but not previously named or understood. The patient who complained of hives after eating lobster or strawberries was told he had an idiosyncrasy. This word, for 30 years too illusive, has been replaced by the term "allergy." The concept of sensitization is being continually widened until not only such disturbances as asthma, hay fever and urticaria are being attributed to allergy, but even some of the phenomena of infectious diseases, our resistance and reaction to them, are shown to be allergic in nature.

Pre-eminent among therapeutic measures of the past few years are the liver treatment of pernicious anemia and the insulin treatment of diabetes. The tremendous number of persons enjoying relatively good health who owe their lives to these discoveries of Minot and Banting is hard to calculate.

Since 1900 the most notable advances in surgery are probably in the fields of surgery of the thyroid, the brain and the nervous system and in the collapse therapy of pulmonary tuberculosis. In the first third of this century the incidence of tuberculosis was reduced $66\frac{2}{3}\%$. Splinting of diseased lung by the surgical procedure of collapse has been put on its present workable and highly successful basis within the present decade.

The outstanding medical achievement of this generation has been the growth of preventive medicine. Many of us present have witnessed the passing of typhoid so that, instead of being as we can recall, one of the most frightful scourges we had to combat, it has become a clinical curiosity. The question of typhoid is probably the major accomplishment of preventive medicine. Therapeutic and prophylactic

immunization against diphtheria, most dreaded of the infectious diseases of childhood, are now so successful that it can truly be said that today when a child dies of diphtheria, someone, somewhere, failed in his duty. Whooping cough and scarlet fever are even more recent additions to the list of diseases preventable by specific therapy.

The foregoing is only a glimpse of the progress which has been made in the field of medical science within a generation or so. Most significant result to humanity has been the almost unbelievable increase in life expectancy in this century. If life expectancy has already increased 25% in one-third of a generation, it is entirely possible that within a generation or so, longevity will be the rule rather than the exception.

Regarding medical progress itself, the facts of prime importance seem to me to be five in number.

First: The necessity for a longer period of training with consequent increased cost of medical education. Our 1900 graduate was not required to have pre-medical schooling beyond high school, could even graduate from medical school in three years, nor was a period of internship necessary before he was licensed to practice.

Second: The call for more specialization due to the constantly widening borders of medical knowledge.

Third: The rising cost of medical service. Of this, it need only be said that though a man pays more for medical care than a generation ago, he should and does receive a great deal more for his money.

Fourth: Past progress in medical science shows the way to still more and quite conceivably greater things to come. Cancer and the degenerative diseases, which at present head the list of causes of death, are far from being solved. What the future will bring to light in the field of chemistry, bio-chemistry, psychotherapy, allergy, endocrinology and other relatively new fields, can today be no more than conjecture, but the possibilities seem to be limitless.

Fifth: The growing need of the modern doctor of medicine is to keep up to date. For the rank and file of medical men, keeping abreast of such mounting changes is a serious problem. If the slogan of scientific research is progress, then the watchword of us who follow must be study, and this can only mean the daily applica-

tion to the assimilation of at least the fundamental developments.

And here, I believe, organized medicine has one great obligation to fulfill, to bring post-graduate instruction to its members. This obligation is being met, at least in part, by the Arkansas Medical Society in conjunction with the State Board of Health. To this duty the members of the county medical societies have responded but poorly. A second method of meeting this obligation of the maintenance of well-equipped libraries, a relatively simple matter if members would select convenient rooms in which to place all their books, journals and periodicals. Each member of each society should spend a few hours each week in study and discussion of matters pertaining to medical progress in his county and state.

A second duty of organized medicine has to do with informing the public of progress in the field of medicine and with what that progress is accomplishing for the general good. With such facts placed honestly and conscientiously before the public, the danger of charlatanism and quackery are more easily recognized and dependable medical service more easily sought.

Medicine has no reason for fear as long as her sons serve humanity with honesty and unselfishness, seek ever for the truth, advance her scope by discovering the cause and effect of disease and the prevention thereof, keep her ranks free of charlatanism and commercialization, and maintain the economics of medicine in line with the economics of each succeeding generation. If this is our foundation, surely the great tower of strength in our professional structure is the retention of individual contact between physician and patient.

There is one practice of a few members of our profession in this state which I hesitate to mention. It is the regrettable fact that a few men seek and find too many lawsuits in which they are called as expert witnesses. We have a few fine, well qualified physicians who can always find defects or injuries which other doctors, equally as fine and well qualified, failed to find. It seems that the offer of a couple of hundred dollars by a smooth attorney stimulates some diagnostic and prognostic abilities to a marked degree. This, gentlemen, is one of the most degrading practices which can be imposed on our profession because one doctor, indulging this inclination, casts a shadow over the entire profession.

Through the press, the radio and sometimes from the platform, we are daily being made aware of a new movement arising in our American life, socialized medicine. In our country the very rich and the very poor receive better medical attention than the middle class which forms the bulk of our population. This group will not accept charity, nor can it be accepted by charitable institutions, and it finds the cost of medical care difficult to meet. This condition will be worked out in due time to the complete satisfaction of all without the socialization of medicine.

A REPORT ON THE FRIEDRICH TEST FOR PREGNANCY

C. EUGENE DE ANGELIS, M. D.
Little Rock

A great deal of work has been done to find a simple test which will determine pregnancy by a chemical examination of the urine. The biological tests are quite reliable, and easily performed, but the cost and constant need of animals at hand prohibit their use in most instances. The physician may have to travel across town for a rabbit, or probably send the patient's urine to a costly laboratory, and then wait twenty-four hours for a report. The disadvantages are so obvious that a simple chemical urine test, which can be performed in a few minutes, read after a few hours, at a minimum cost is most logical answer to our solution.

Skin tests for determining pregnancy have been used, but the results are so unreliable that they have been abandoned. At present, the demand is for a procedure as simple as that for determining the presence of sugar in the urine. (4) Visscher-Bowman in 1934 described a chemical urine test for pregnancy. He used four solutions, which were freshly prepared at the time of the test—a disadvantage itself. As reported by a number of workers the percentage of positives for pregnant women is too low, and too high for non-pregnant women. (2) Krieger tested the urines of 276 pregnant and non-pregnant females, and found that there were 36% positives among 58 women not pregnant; 59% positives among 91 women prior to their third month of gestation, and 67% positives of 83 women beyond their third month of pregnancy. He also subjected the urines of 44 puerperal patients, and found that 55% gave positive results.

(1) Friedrich simplified the Visscher-Bowman test by using only one solution, which was suf-

pared freshly prior to a test. To one c.c. of urine, three drops of a 25% solution of hydrochloric acid are added, and the contents boiled for a few minutes. If positive, the urine will sufficiently stable that it did not have to be returned reddish brown, and a black precipitate will form after several hours. However, the urine must be a fresh morning specimen with the specific gravity adjusted to a 1016 by the addition of distilled water. In 1937, (3) J. H. Leunbach and F. Koeppe began working on the chemical test described by (1) Friedrich. They filtered the urine, and placed one c.c. of urine into each of three tubes as follows:

1. To one c.c. of urine with a specific gravity of 1016, three drops of a 25% solution of hydrochloric acid are added and the contents heated for twenty-five minutes in a water bath.

2. This tube containing undiluted urine is heated in the same manner.

3. Into a third tube with one c.c. of urine specific gravity 1016 five drops of a 25% solution of hydrochloric acid are added and the contents boiled for two minutes over an alcohol lamp.

The tubes are then set aside at room temperature for several hours, and read in good daylight. A positive reaction is indicated by the formation of a black precipitate in tubes one and three, which does not dissolve by the addition of a 50% solution of urea. However, the presence of one small particle is sufficient to call the test positive. Tube two is used as a control. A precipitate may form, but will not be black.

Leunbach and Koeppe subjected the urines of 380 proven cases of pregnancy, and found that the test agreed in 358 instances—an accuracy of 95% which is very good. We were so enthused over this report that we ran tests on the urines of 200 pregnant women, who were beyond the fourth month of pregnancy, and could easily be diagnosed clinically. Our cases were divided into two groups of 100 each. In the first group, the specific gravities were not adjusted and varied from 1008 to 1032, the majority being about 1022. From this series we found that 63% of the urines gave positive results. The higher the density, the more abundant was the characteristic precipitate, and, in many instances, was proportional to the specific gravity reading. About ten urines showed albumin, and regardless of the density, strongly positive reactions were obtained.

A second series of 100 cases was run, and in this group the urines were adjusted to 1016.

Of this series, 90% gave positive results. The higher incidence of positives, no doubt, was due to the absence of low density urines. A black precipitate, regardless of its nature or quantity was interpreted as a positive reaction. The nature of the precipitate in most of the tubes consisted of amorphous heavy particles varying in size and quantity. In about 15% of the combined series the particles were needle shaped.

A study of the test using negative urines has not been fully carried out so that a true composite picture is not available at the present time; however, we do suggest its trial and the results interpreted cautiously.

Additional tests will be run, and modifications tried as we believe the presence of certain proteins, as egg albumin, added to urines in certain amounts to be determined will bring out positive precipitates more distinctly.

- (1) Friedrich, B.: "Zur Schwangerschafts—Diagnose" Carl Neift, Bleicherade am Harz, 1937 —Acknowledged through Journal of Contraception—March, 1939.
- (2) Krieger, V.: Investigation of the Visscher-Bowman Test for Pregnancy: Abstract from Jour. A.M.A.: Page 2636: June 24, 1939.
- (3) Leunbach, S. H. and Koeppe, F.: A Chemical method for the Diagnoses of Pregnancy; Journal of Contraception: 4: 51-54. March, 1939.
- (4) Visscher, J. B. and Bowman, D. E.: Pro. Soc. Exper. Biol. and Med.: 31:460, 1934.

COMING MEDICAL MEETINGS

American Medical Association, New York, June 10-14th, 1940.

AMERICAN MEDICAL
ASSOCIATION

NEW YORK

JUNE 10TH-14TH

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

FOR the past few years vast numbers of school children and college students have been tested with tuberculin and the X-ray. Out of these studies have come some definite conclusions pertaining to the incidence of tuberculosis in youth. Little has been reported however about the outcome of cases discovered in mass-testing programs, doubtless because sufficient time has not elapsed in most of these studies to justify an appraisal of the results of treatment. In Massachusetts where pioneer work in mass case-finding was begun more than a decade ago, Chadwick and Evarts have attempted to evaluate the results of various types of treatment and the fate of tuberculous adolescents. A summary of their findings follows.

TUBERCULOSIS IN ADOLESCENTS

The case fatality rate of pulmonary tuberculosis cannot be determined unless we follow a large number of cases from the time diagnoses are made until the death of all the individuals concerned. Unlike acute communicable diseases, tuberculosis is a disease of long duration. It may be acute, but is more often chronic, with periods of quiescence followed by exacerbations and may so continue for years.

We may, however, measure the effect of treatment by checking against each other, groups of similar age who have been treated by different methods for the same length of time. The authors studied the records of 245 cases who had parenchymatous pulmonary tuberculosis at the time they came under observation. Most of them received treatment in some sanatorium. These were divided into three groups according to the time they had been under observation, namely, Group A, from 5 to 10 years; Group B, from 3 to 5 years; Group C, less than 3 years.

The type of treatment received by these groups, further divided according to stage of disease, was found to vary during the past 10 years. There was a trend away from routine bed-rest treatment for a preliminary try-out period to be later supplemented by pneumothorax if the disease were not controlled. The present practice is to institute pneumothorax promptly. The

minimal cases of Group A admitted to Middlesex County Sanatorium (prior to 1934) received no immediate treatment with pneumothorax; 40% of Group B were given pneumothorax promptly; of Group C, 87% were given pneumothorax soon after admission.

The conclusion of the authors, based on their own studies and supported by those of others, are that the mortality from tuberculosis in adolescents is high and treatment very discouraging. Morgan, reporting in 1938 on 320 cases of boys and girls 10 to 18 years of age treated in the sanatorium prior to 1933, found that 62% were dead, 14% under treatment, 17% well, and 7% not located. The treatment in this series consisted of prolonged bed-rest supplemented by pneumothorax in a few cases, and then given only after a period of waiting. Zacks recently studied 186 cases treated in sanatoria and observed for a period of about 4 years. Those that had routine sanatorium treatment only, showed a mortality of 30.9% for boys and 34.4% for girls; those that had sanatorium treatment plus pneumothorax, showed a mortality of 8.5% for the boys and 23.1% for the girls. In the author's group observed for 5 to 10 years, the deaths were 4.8% for the boys and 27.5% for the girls. Half of these cases were given pneumothorax.

Pneumothorax should be instituted as soon as possible after diagnosis is made even in the minimal cases and this should be supplemented by pneumonolysis if satisfactory collapse is prevented by adhesions that can be cut. Ineffective pneumothorax should be abandoned and some other surgical collapse procedure carried out. When a satisfactory collapse with pneumothorax is obtained, it should be continued for a minimum of 3 years and for 5 years in the cavity cases.

Patients discharged from the sanatoria should be considered as having completed only the first phase of treatment and should return at frequent intervals for consultation during subsequent

years. If they are pneumothorax cases, they will have their refills and in any event their condition will be rechecked. A roentgenogram taken every three months will be the most important means of following the course of the disease. If the old lesion shows reactivation, or a new one appears, prompt readmission and suitable treatment should be instituted at once.

The evidence available in this and other studies indicates the ineffectiveness of bed-rest treatment alone in staying the progress of tuberculosis in adolescents.

Treatment of Pulmonary Tuberculosis in Adolescents, Henry D. Chadwick, M.D., and Helen W. Evarts, *Amer. Rev. of Tuber.*, Vol. XLI, No. 3, March, 1940.

MATERIAL assembled by Wade Hampton Frost now made available points to the interesting observation that the maximum mortality risk from tuberculosis continues to be in the age period 20 to 30 years, despite the impression that that risk has been postponed to older age periods. Excerpts of his notes, which are well illustrated with graphs, follow.

THE AGE OF GREATEST RISK

The peak of the tuberculosis death rate seems to have shifted toward older age groups. For example, tuberculosis mortality rates for Massachusetts show that the "peak" occurs in the decade 20 to 30 for the year 1880, in the decade 30 to 40 in 1910 and in the decade 50 to 60 in 1930.

Looking at the 1930 curve, the impression given is that nowadays an individual encounters his greatest risk of death from tuberculosis between the ages of 50 and 60. But this is not really so; the people making up the 1930 age group 50 to 60 have, in earlier life, passed through greater mortality risks.

This is demonstrated by plotting mortality rates at successive ages in cohorts, that is, groups of people born in a particular decade. Graphs so made indicate that the group of people who were born in the decade 1871 to 1880 and who, in 1930, were 50 to 60 years old, (if alive) have in two earlier periods, passed through greater risks, one shortly after birth, the other in the period 20-30 years. No matter which group of cohorts are studied (decades 1870 to 1910) the peak of the mortality curve falls in the 20-30 decade.

Without attempting to interpret the facts in detail, Frost notes certain implications, as follows:

1. Constancy of age selection (relative mortality at successive ages) in successive cohorts suggests rather constant physiological changes in resistance (with age) as the controlling factor.
2. If, as we may suppose, the frequency and extent of exposure to infection in early life have decreased progressively decade by decade, there is no indication that this has had the effect of exaggerating the risk of death in adult life due to lack of opportunity to acquire specific immunity in childhood.
3. Present-day "peak" of mortality in late life does not represent postponement of maximum risk to a later period, but rather would seem to indicate that the present high rates in old age are the residuals of higher rates in earlier life.

The Age Selection of Mortality from Tuberculosis in Successive Decades, Wade Hampton Frost, M.D., *Milbank Mem. Fund Quarterly*, Vol. XVIII, No. 1, Jan., 1940.

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OF THE

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EDITORIAL

OUR PRESIDENT

Henry Thomas Smith, McGehee, installed as the 65th President of the Arkansas Medical Society in Fort Smith, April 17th, was born at Cincinnati, Arkansas, October 16th, 1885. He attended school at Cincinnati and later took pre-medical work at the University of Arkansas in Fayetteville. His medical education was obtained from Memphis Hospital Medical College, now the University of Tennessee, from which he received his degree of doctor of medicine in 1910. Serving an internship at Saint Joseph's Hospital, Memphis, he located at McGehee where he has practiced continuously since 1911. Postgraduate work has always interested Dr. Smith and he has attended sessions at Johns Hopkins University, Tulane University, and Chicago University on several occasions. He became a Fellow of the American College of Physicians, October 27th, 1929, being the fifth member of this Society honored with fellowship. During the World War he served on the Medical Advisory Board. In the McGehee Rotary Club he holds the unique distinction of 100% attend-

ance for 14 years and was the first president of the club. He holds membership in the Masonic bodies and is a member of the Scottish Rite. He was married to Miss Mary Avery, of McGehee, on October 12th, 1912. Organized medicine has been his most active interest since he started practice, he having held all offices in his county and district medical society, serving as secretary of the Desha County Medical Society for a number of terms. He was Councilor from the Fourth District for two terms, 1930-1934. Other activities have included representing his county medical society in the House of Delegates and duties with various committees.

A sincere, earnest physician, devoted to the interests of organized medicine, determined to advance the aims and ideals of the profession, yet no less determined to yield naught to the encroachments of agencies which seek to harass or limit the field of the private practice of medicine, President Smith comes to head the Society at a time when a fearless, clear-thinking, and aggressive leader is needed. Under his guidance the Society will attain greater usefulness to the physician and to the public in Arkansas.

AN INNOVATION

Seeking to help in the preservation of your copy of The Journal, this issue has been punched to fit into the usual type of student's note book. In this manner, copies of The Journal may be kept together without the expense of binding. We shall be glad to have the comments of the members as to the value of this innovation.

CANCER AND THE WOMEN'S FIELD ARMY

At the request of the Society, the Auxiliary sponsored the first campaign for the Women's Field Army Against Cancer in Arkansas during April. The Women's Field Army, a division of the American Society for the Control of Cancer, was formed to reduce cancer mortality by educational work. The effort is to bridge the gap between the person who fears or has cancer and the best medical treatment. The Army will concentrate on educational work, leaving to other organized agencies the care of the cancer patient. There is no more important aspect of the cancer problem than that of preventing thousands from becoming incurably ill from the dread disease—this the Army proposes to do.

April is the month designated by the American Society for the Control of Cancer as enlistment month. It has further been so designated by a special act of the Congress. In Arkansas, the drive was under the direction of Mrs. S. J.

Wolfermann, State Commander. Preliminary reports have reached The Journal of the results in two sections, over 500 women having joined the Army. There is no reason why the Women's Field Army in Arkansas should not have 5,000 members or more and these will be easily obtained if the Society will cooperate with the Auxiliary to see that all interested persons in the state are afforded an opportunity to join.

In order that the greatest possible support might be given the enlistment drive of the Army, the House of Delegates at the Fort Smith session requested each county medical society to appoint a committee on cancer control which would cooperate with the Auxiliary for the furtherance of the aims of the Women's Field Army in that county. The Journal emphasizes this request and asks that such committee be promptly appointed and that notification of them be sent to Mrs. S. J. Wolfermann, 1109 Adelaide Avenue, Fort Smith. Full literature on the campaign as well as literature on general aspects of the cancer problem may be obtained from Mrs. Wolfermann.

THE NATIONAL PHYSICIAN'S COMMITTEE FOR THE EXTENSION OF MEDICAL SERVICE

To those who heard E. H. Skinner, of Kansas City, at the Fort Smith session, the National Physician's Committee for Extension of Medical Service has a definite meaning. We feel sure these physicians are now thoroughly in sympathy with the objectives of this organization and will make their cooperation material by definite contributions toward its continued activities.

A new organization, its need has been shown to exist by the support which leaders and trustworthy members of the profession have given it their hearty endorsement. The need now is for the enthusiastic support and assistance of every member of the medical profession.

Although the aims of the organization have been well covered by the literature which had been sent every practitioner, it may not be amiss to briefly review these objectives here. The need to carry to the public the true story of the achievements of organized medicine, its record in matters of public health and its aims and desires for continued improvement of medical service to the people of the United States have long been realized by the profession. Critics of organized medicine deserve to be answered publicly; there is every reason that the good of private practice be preserved by the American public.

Organized medicine has not found it properly within its ability to do these things. In some instances regulations effectively prevented the entrance of medical organizations into such a field of activity. The new committee has been formed to vigorously prosecute a campaign to this end and this it proposes to do.

The benefits of a continued, aggressive publicity along these lines will be felt by every citizen and practitioner. To date, but a small proportion of our organized medical body has contributed to the movement. Everyone should carry his part and The Journal, therefore, urges all to have an active part in the work of the committee.

EDITORIAL COMMENT

PEDIATRIC REFRESHER COURSE

As a reminder to the membership, The Journal lists the schedule of the pediatric course conducted by Dr. Jean V. Cooke under the joint sponsorship of the Committee on Maternal and Child Welfare of the Society and the Arkansas State Board of Health.

Fort Smith—Mondays—June 3rd, June 10th, June 17th, June 24th. Auditorium, Saint Edwards Mercy Hospital.

Prescott—Tuesdays—June 4th, June 11th, June 18th, June 25th. Loda Hotel.

McGehee—Wednesdays—June 5th, June 12th, June 19th, June 26th. Greystone Hotel.

Searcy—Thursdays—June 6th, June 13th, June 19th, June 26th. Auditorium, City Hall.

Jonesboro—Fridays—June 7th, June 14th, June 21st, June 28th. Noble Hotel.

Members are urged to support this cooperative venture by their attendance. Continuance of the refresher courses in the state depends, in considerable part, upon the desire manifested by physicians for this postgraduate study.

ADVERTISING COOPERATION

The Journal is in receipt of a letter from Campbell, Mallory and Throgmorton, Little Rock, agents for the Society in malpractice group contracts, which reads: "We are very much pleased to advise you that in addition to the inquiry made direct to you by Dr. * * *, we have today received inquiries from four other doctors, three of whom mentioned specially our ad in the medical Journal." The Journal is appreciative of this fine cooperation between our members and our advertisers.

PROCEEDINGS OF SOCIETIES

The annual banquet session of the Johnson County Medical Society was held in Clarksville May 2nd, James M. Kolb acting as toastmaster, and Raymond Cook, Little Rock, speaking on "External Diseases of the Eye."

G. R. Siegel, Secretary.

The Alumni Association of the University of Arkansas School of Medicine will honor the 1940 class at a banquet to be held at the Albert Pike Hotel, Little Rock, June 3rd.

The Ouachita County Medical Society met in regular monthly session May 2nd, at the Camden Hospital. After a delightful banquet served by the nurses of the hospital the following program was rendered: "History of Medical Education in Arkansas," F. A. Corn, Lonoke; and "Progress in Ophthalmology of Interest to General Practitioners," (illustrated with colored lantern slides) R. J. Calcote, Little Rock, and a motion picture on "Eclampsia."

R. B. Robins, M. D., Secretary.

The Pulaski County Medical Society was addressed May 20th, in a symposium on diabetes, by Gerald Blankfort, "Diabetes in Medicine"; Edgar J. Poth, "Diabetes in Surgery"; Charles R. Henry, "Diabetes in Obstetrics," and Sam Phillips, "Diabetes in Pediatrics."

E. H. White, Secretary.

The First Councilor District Medical Society met in Jonesboro, May 15th, for the following program: Address of Welcome, R. C. Shanlever, Jonesboro; Response, L. H. McDaniel, Tyrone; "Mental Health of the Infant," J. F. Jackson, Walnut Ridge; "The Medical Uses of Ultra-Violet and Infra-red Radiation," W. S. Lawrence, Memphis; "Contraindications in Finding and Treating Syphilis," J. B. Elders, Walnut Ridge, and "The Neurotic, the Constitutionally Inadequate and the Mildly Insane," Joe Verser, Harrisburg. A luncheon was held at noon. J. H. McCurry, Cash, was re-elected secretary-treasurer, and the next meeting will be held in Osceola.

The Lawrence County Medical Society was addressed, May 14th, by Sam Rains, Memphis, "Urinary Calculi"; J. C. Hughes, Hoxie, "Early American Medicine," and A. G. Henderson, Imboden, "The Clinician."

T. C. Guthrie, Secretary.

The Third Councilor District Medical Society met at Brinkley, May 16th, for the following program: Address of Welcome, R. S. McGregor, Brinkley; Response, J. O. Rush, Forrest City; "Treatment of Specific Urethritis," H. Fay H. Jones, Little Rock; "Heart Disease," Carl Sanders, Memphis; "Treatment of Colles Fracture," Jos. F. Shuffield, Little Rock; "Intestinal Disorders in Children," Thomas Mitchell, Memphis. A dinner session concluded the program. The Society will next meet in Helena.

The Fifth Councilor District Medical Society met in dinner session at Waldo, May 14th, for the following program: "Significance of Early Recognition of Acute Abdominal Emergencies," Wm. Hibbits, Texarkana; "Sulfapyridine and Sulfanilamide: Their Uses in Diseases of Children," Chester E. Kitchens, Texarkana, and "Some Eye, Ear, Nose, and Throat Topics of Interest to the General Practitioner."

The Independence County Medical Society met in dinner session at Batesville, May 13th, for the following scientific program: "Narcotics," E. M. Gray, Mountain Home; "Ureteral Calculi," W. J. Ketzer, Batesville; "Hormones," F. A. Gray, Batesville, and "Case Report of Near-Fatal Intra-abdominal Hemorrhage from a Normal Ovary," J. J. Monfort, Batesville. The following committee on cancer control was appointed: V. D. McAdams, Cord; E. M. Gray, Mountain Home, and O. J. T. Johnston, Batesville.

The Crawford County Medical Society was addressed, April 23rd, by W. O. Arnold, Fort Smith, "Asthma and Its Treatment."

The Craighead-Poinsett County Medical Society was addressed, May 2nd, by Duanne Carr, Memphis, "The Role of Amebiasis in Chronic Digestive Disturbances," and Conley Sanford, Memphis, "Injuries to the Chest."

The Mississippi County Medical Society was addressed, May 7th, by Richard Ching, Memphis, "Blood Pressure," and Gilbert Levy, Memphis, "Certain Drugs in the Treatment of Meningitis."

The Benton County Medical Society met in dinner session at Gentry, May 9th, for the following program: "Hyperinsulinism," Roy E. Myers, and "Hyperthyroidism," A. M. Gregg, both speakers of Joplin.

Geo. M. Love, Secretary.

PERSONALS AND NEWS ITEMS

Henry G. Hollenberg, Little Rock, won the first leg on the H. King Wade golf trophy, first contested for at the Fort Smith session of the Society.

S. P. Cromer, Little Rock, recently addressed the Pine Bluff Rotary Club on "History and Trends of Medical Education."

Joe B. Wharton, J. A. Moore and G. D. Murphy have been appointed as a committee to work with the Charity League of El Dorado in mapping its program of activities.

Lewis Hyatt and Gerald Blankfort have been appointed to the clinical staff of the University of Arkansas School of Medicine.

A. A. Blair, Fort Smith, took special work at Johns Hopkins during May.

J. S. Southard has been elected surgeon of the Fort Smith post of the American Legion.

S. J. Wolfermann, Fort Smith, visited the Mayo Clinic during May.

The Arkansas Hospital Association has elected the following officers: Vice-president, A. S. Buchanan, Prescott, and Secretary-treasurer, Raymond T. Smith, of Fort Smith.

T. A. Peterson is erecting a clinic building at Wynne.

"The Present Trend in Medicine" by H. Fay H. Jones, Little Rock, appeared in the April issue of The Mississippi Doctor.

Chas. T. Chamberlain, Fort Smith, has been elected a Fellow of the American College of Physicians.

R. B. Robins, Camden, was elected Governor for District 7-B, Lions Club, May 20th.

The following attended the convention of Arkansas Lions Clubs in Fort Smith, May 19th-20th: Chas. Beeby, Huntsville; R. B. Robins and S. A. Thompson, Camden; G. R. Siegel, Clarksville, and J. Harry Hayes, Little Rock.

M. S. Craig has purchased the interest of O. J. T. Johnston in the Johnston-Craig Hospital at Batesville.

"Synovectomy of the Knee Joint," by F. Walter Carruthers, Little Rock, appeared in the May Southern Medical Journal.

Alan G. Cazort, Little Rock, addressed the Texas Allergy Association, May 13th, on "Air Borne Allergens in Atopic Dermatitis."

The C. V. Mosby Company, Saint Louis, has just published "Synopsis of Operative Surgery," by H. E. Mobley, Morrilton.

L. S. Dunaway, Jr., addressed the Conway Kiwanis Club recently on "Tuberculosis in Arkansas."

D. W. Goldstein, Fort Smith, recently addressed the Senior High School student body on "Cancer."

Miles F. Kelley, Sheridan, attended summer army maneuvers during May at Fort Benning, Georgia.

Virgil Payne, Pine Bluff, suffered a fracture of cervical vertebrae while returning from the Fort Smith session.

H. A. Stroud was guest editorial writer for the Jonesboro Daily Tribune, March 28th, using the subject, "The Campaign Against Tuberculosis."

Jos. F. Shuffield, Little Rock, was elected class president of the Scottish Rite degree class at Little Rock, May 6th-8th.

D. L. Owens, Harrison, has recovered from a recent appendectomy.

OBITUARY

CALEB EWING WITT, age 78, died at his home in Little Rock, April 23rd. Born in Humboldt, Tennessee, he completed the high school course there and graduated in medicine from Missouri Medical College in 1889. Later he completed a medical course at Hospital College of Medicine in Louisville. A Professor of materia medica at the University of Arkansas School of Medicine for 18 years, he had been appointed emeritus professor of medicine at that school. In recent years he had served as city physician in Little Rock. He was elected to honorary membership in the Pulaski Medical Society and in the Arkansas Medical Society in 1938. He is survived by his wife.

FRANKLIN PIERCE VINES, age 63, died at his home in El Dorado, April 29th. Born at Hillsboro, October 4, 1876, he graduated from the Memphis Hospital Medical College in 1903 first practicing at Strong, moving to El Dorado in 1921. In addition to his membership in the Union County Medical Society and the Arkansas Medical Society, he was a Mason, a Shriner, and a member of the Methodist church. He had retired from active practice on January 1st. Surviving relatives are a wife and a daughter.

FRANCIS M. REED, age 69 years, of Turrell, died in a Memphis hospital, May 6th, after a short illness. Born in Missouri, he had lived in Turrell since 1903. Surviving relatives are his wife and daughter.

PROCEEDINGS
OF THE
SIXTY-FIFTH ANNUAL SESSION
OF THE
ARKANSAS MEDICAL SOCIETY
GOLDMAN HOTEL, FORT SMITH
April 15th, 16th and 17th, 1940

**FIRST SESSION, HOUSE OF DELEGATES
APRIL 15, 1940, 9:00 A. M.**

The meeting was called to order by President Buchanan.

The following delegates and county society members seated as delegates by action of the House of Delegates were present:

ASHLEY—M. C. Crandall; Benton—M. W. Chastain; BOONE—H. V. Kirby; BRADLEY—W. J. Hunt; CARROLL—J. F. John; CHICOT—J. H. Burge; CLAY—F. H. Jones; CRAIGHEAD-POINSETT—Joe Verser; CRAWFORD—J. M. Stewart; CRITTENDEN—L. C. McVay; DESHA—J. H. Hellums; FRANKLIN—W. C. Porter; GARLAND—J. M. Proctor, H. King Wade, J. S. Stell; GRANT—Miles F. Kelly; GREENE—R. J. Haley, Jr.; HOT SPRING—W. G. Hodges; INDEPENDENCE—L. T. Evans; JACKSON—A. L. Best; JEFFERSON—J. M. Lemons; JOHNSON—Earle H. Hunt; LAWRENCE—J. C. Hughes; LITTLE RIVER—P. H. Phillips; MILLER—H. E. Murry; OUACHITA—R. C. Kennerly; POLK—B. H. Hawkins; POPE-YELL—Robert Hood; PRAIRIE—J. C. Gilliam; PULASKI—M. J. Kilbury, G. W. Reagan; ST. FRANCIS—J. O. Rush; SEBASTIAN—E. C. Moulton, A. F. Hoge; SEVIER—C. C. Hanchey; UNION—B. L. Moore; WASHINGTON—R. H. Huntington, and WHITE—S. J. Allbright.

Other members of the House of Delegates present were: President Buchanan; Councilors F. D. Smith, J. O. Rush, S. W. Douglas, R. B. Robins, Euclid Smith, J. F. John and Clyde McNeil; Past-presidents, E. E. Barlow, E. F. Ellis, Geo. B. Fletcher, L. J. Kosminsky, W. H. Mock, M. E. McCaskill, M. L. Norwood, D. A. Rhinehart, Frank Vinsonhale, S. J. Wolfermann, W. T. Wootton, and Secretary Brooksher.

S. J. Allbright reported that the Committee on Credentials had examined the credentials, found them in order, and that a quorum was present.

By motion the proceedings of the Sixty-fourth Annual Session as published in the June, 1939 issue of The Journal of the Arkansas Medical Society were adopted as correct.

President Buchanan appointed the following Reference Committee: H. King Wade, A. B. Dickey and Fred H. Krock.

J. M. Proctor, Vice-president, took the chair.

President Buchanan read the President's Address to the House of Delegates.

**PRESIDENT'S ADDRESS TO THE HOUSE
OF DELEGATES**

It has always been my belief that the president of the Arkansas Medical Society should give to the House of delegates a brief resume of his stewardship and activities, and that he should make such recommendations for its consideration as he deems best for the progress of organized medicine in the state of Arkansas.

First, let me say that it has been a very great honor and pleasure for me to serve as president of the Arkansas Medical Society. No position, no office in any group, could have been so gratifying to me as that of representing my medical profession as president. I have driven several thousand miles to visit almost every section of the state. I have spoken to medical groups, to Rotary, Lions, Kiwanis clubs, and to P.-T. A. and women's groups in various sections of the state, and in each place I have met many old friends and have, I hope, made new ones. I have been accorded every courtesy, and I desire to thank all of you for the opportunity of serving as your president.

In this period of economic turmoil and attempted political control it is natural that controversial questions should arise, but so far as I know nothing of serious consequence has remained unsettled.

However, in reviewing the recommendations of the various presidents since 1905, I have been impressed by the fact that so few of their recommendations ever accomplished the purpose for which they were intended. I cannot bring myself to believe that in all these years so few constructive recommendations to the House of Delegates have been made, nor do I flatter myself that the fate of my recommendations will differ from those of my predecessors. In thinking over this situation, I have wondered if it is not the result of electing delegates of the county societies for one year only, to serve for a brief

three days during the annual meeting. You recall that a resolution offered at any meeting must be held over one year before it can be brought up for adoption or rejection. If the delegates were elected for two years, they could at least have a little time to consider a resolution which has been offered. And if this is true of the state, it is equally true of the American Medical Association. I offer this idea as food for thought rather than as a formal recommendation that the existing policy be changed because I do not consider it advisable to centralize too many of the duties of the society in the hands of a few; rather, I believe it is wise to distribute the duties among as many members as possible in order to create more widespread interest.

There was a resolution offered last year which will be up for adoption at this meeting: To require the state secretary to be chairman of the scientific program committee. It seems to me that the secretary has enough responsibility without heaping this additional duty upon his shoulder. I do not know whether the secretary desires this added responsibility or not, but be that as it may, I do not subscribe to this resolution. I believe that if such duties are passed around, more interest will be manifested.

I do heartily recommend that the Arkansas Medical Society concur in the platform of the American Medical Association as outlined in the Journal in the issue of March 23, 1940, page 1081.

There is a very large percentage of eligible doctors in Arkansas who are not members of any medical society. Organized medicine needs their aid and influence and they, in turn, need the aid and influence of the medical profession. I recommend, therefore, that a well organized campaign for members be undertaken. If there was ever a time when medicine needed to be one hundred percent organized, it is now, during these days of threatened political interference.

Each member of the Arkansas Medical Society should also lend every possible assistance to the Women's Auxiliary in its effort at complete organization.

I feel that definite and vigorous steps should be taken, looking toward the supervision by the society of all medical activities within the state: The state welfare, health boards, tubercular and cancer clinics, hospital for the insane, the medical phase of the Farm Security Administration, even the county coroners, who should be licensed physicians. I am not of the opinion that the

state society should attempt too much control of the medical matters of the Farm Security Administration. A rule applicable in one county is not always feasible in another. For this reason I believe that the county societies should continue to handle this question without interference from the state organization.

As an inducement for members of the Arkansas Medical Society to do postgraduate study and to stimulate doctors of this state along the lines of medical endeavor, the society could well afford to establish a distinguished service medal, a prize to be awarded to any doctor who distinguishes himself in the field of science, legislation, public relations or in any manner which redounds to the benefit of organized medicine.

We all realize the urgent necessity of a Class A medical school in this state for the education and training of our future doctors. Therefore, the entire membership of the Arkansas Medical Society should bend every effort to assist those in authority in maintaining the standards of the school according to the requirements of the American Medical Association. I am told that our state medical school is operating on about one-third of the amount of money that is available to other institutions of similar standing. A strenuous effort should be made to correct this situation.

I also recommend a more vigorous publicity campaign against charlatanry and quackery, a campaign to inform the laity about medical problems in general. I do not think that we who are on the firing line of organized medicine can too often emphasize and reiterate our fixed opinion that curative medicine by the individual physician is the best method for those we serve. Curative medicine has improved wonderfully in the past quarter of a century, and this advance has been accomplished without the assistance of political management or crack-pot social workers. This fact we all know to be true, but there should and must be some way to inform those who do not have the opportunity to observe the truth as we do.

I cannot resist this opportunity to call the attention of the House of Delegates to the commendable leadership of the Pulaski County Medical Society in organizing a Group Hospitalization Plan, which, it is hoped, will be a barrier to political efforts at control of a matter which belongs in the hands of the medical profession. This organization is headed by men who are prepared to defend medical ethics at all costs and who will resign from the Group Plan board

rather than imperil the ethics of our profession.

Gentlemen of the House of Delegates, I sincerely thank you.

The Committees of the Society then reported in order, their reports being referred to the Reference Committee.

REPORT OF COMMITTEE ON SCIENTIFIC WORK

R. B. ROBINS, Chairman

The report of your Committee on Scientific work is evident in the program which you have in your hands. There are fifteen members of the Arkansas Medical Society on the program and there are eight outstanding out-of-state guests on it. We are certainly grateful to all the men who are participating. We feel sure that you will find this a well diversified program and one which you will find to be very profitable to you.

REPORT OF LEGISLATIVE COMMITTEE

JOS. F. SHUFFIELD, Chairman

For many years the department of medicine of the University has had a precarious existence due to the danger of it losing its class "A" rating, because of insufficient clinical material, or lack of beds under its control. Sufficient praise can never be given to the untiring and unceasing labors, over a period of years, of the former dean, Dr. Vinsonhaler, to remedy this situation. He laid the groundwork and made the people conscious of the fact that only the highest type of instruction was worthy of the citizens of our state, and that this must be solved satisfactorily, or the school would perish. His was the guiding spirit in formulating a plan that would provide a sufficient number of beds, under the exclusive control and management of the school, so as to assure it a permanent place among the first-class institutions of this country. When the finally perfected plan was submitted, it was up to this committee to help to secure the necessary funds for carrying it on.

Realizing that it was a duty which we owed to the many graduates of this institution, now practising in our state; to those young men now receiving their training there, and to the citizenship of Arkansas, this committee gave wholehearted support to the task of insuring the necessary funds. In this work, in which many of you assisted, we must never overlook the late Leo Nyberg, Governor Bailey, the Alumni Association, its President, Euclid Smith, and the individual members, who spent very largely of their time and energy in working with the committee, until success finally rewarded our efforts.

This work covered a large part of the legislative session, for there was strenuous objection on the part of those who were to be taxed to supply the necessary funds, and it often seemed that the result was in doubt. Our exclusive attention had to be devoted to it for several weeks. As in so many of our past efforts in bettering the condition of medicine in our state, our efforts were successful and the school now is equipped with the minimum number of beds required, housed in a building that is a credit to the school, and is adequate to its needs. Our future task will be to secure a continuance of the necessary appropriation for this University hospital and medical school.

Much attention has been devoted in all the states to the question of the possible influx of foreigners into our

country, and in our profession what might be the result of numbers of physicians from foreign countries applying for licenses by reciprocity. In order to settle the question so far as our state is concerned, we secured the enactment of a law which gives our examining board the authority of refusing to license any person who is not an American citizen. The board is authorized, in its discretion, to recognize a foreign license if it so desires, and it is believed that if the board should be convinced of the proper learning, and high character, of an applicant, who desired to locate in a community that was not adequately served, it might find it advantageous, in such a case, to issue a license.

A large part of the time of the committee is necessarily devoted to opposing unwise legislation when proposed by those who would lower the standard of medicine, and such was the case in the past session. To recount the instances where we thus looked out for the interests of the profession, would be a waste of your time. The optometrists caused a bill to be introduced, after submitting it for our study, and we carefully watched its progress so as to see that it did not infringe on our domain.

We are always open to suggestions, and either during this meeting, or at any time before the next session of the Legislature, and the committee (of whomever it may be composed) will be glad to have your ideas as to how we may better the cause of organized medicine.

Next year will be a legislative year and we believe that there will be a very strong attack made on the basic science law. We are now calling on our members to become familiar with this law in order that they may see the good that has come from it. If you understand the law you can defend it but you must expect a hard fight.

It has been suggested by many that the Committee should sponsor a bill in the next legislature requiring all coroners in the state to be graduates in medicine and in good standing with the examining board. This law would materially aid in solving the cause of many deaths now considered as of unknown cause and render much-needed and strongly sought-for help by the law enforcement agencies. The police officials are anxious for this assistance.

It has also been suggested that the Committee sponsor a law requiring annual registration of physicians as now in operation in several states. This subject has been referred to The State Medical Board of the Arkansas Medical Society for their consideration and recommendation.

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

W. B. GRAYSON, Chairman

The Committee on Health and Public Instruction desires to report that health conditions in Arkansas continue to improve during the past year, but warns the public and the profession against any false security, or the relaxation of any public health efforts.

Diseases of the heart, cancer, cerebral hemorrhage, nephritis, all accidents, pneumonia, tuberculosis, and diseases of the digestive system, were the principal causes of death in 1939. Preventive measures, as well as curative measures, have lowered the morbidity and mortality of typhoid, poliomyelitis, scarlet fever, diphtheria, epidemic cerebrospinal meningitis, pneumonia, malaria, and pellagra.

The Committee believes that conservation of life includes, not only the prevention and cure of disease conditions, but accident prevention as well. Automobile acci-

dents lead as a cause of accidental deaths, and more attention should be given this subject. It is thought that some official agency should attempt to teach ambulance operators, highway patrolmen, foremen in industrial plants, and construction foremen, the proper method of handling emergencies.

More cooperation is needed from school teachers in control of communicable diseases, especially smallpox and tuberculosis. Pupils should be refused admittance to schools unless complying with the act concerning successful vaccination against smallpox. Physical examinations given school teachers should be very thorough and complete, including X-ray by a competent roentgenologist.

The great amount of publicity given the syphilis control program directs the attention of the laity to this disease, and because of the colored domestic servants, a socio-economic problem can arise. The profession should advise that the disease is not new, and that a specific remedy is at hand, and has been for a long time. A good start has been made in attacking the syphilis problem, but very little attention is being given gonorrhea.

In the past few years a great amount of scientific work has been done in nutrition by some of our leaders. We believe the profession should advise in detailed manner with their patients on nutritional problems.

Mental hygiene is a rich undeveloped field in Arkansas, and if more efforts were put forth on this program, especially with children, a good number could be saved of many trials and failures, and possible complete collapse as they grow older. It is our opinion that the superintendent and staff of the State Hospital welcome physicians to spend time with them studying and diagnosing these conditions.

There were approximately 35,534 births, 1,253 stillbirth, and 16,493 deaths in Arkansas in 1939. (Approximately, because complete figures are not yet available.)

The profession should take more active interest in the development of a safe milk supply for their respective communities, and also advise on environmental sanitation.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

S. J. ALLBRIGHT, Chairman

Your Committee on Medical Education and Hospitals desires to submit the following report:

Medical Education

Commendable progress has been made during the past year in undergraduate medical education generally throughout the United States and especially is this true in Arkansas. By the acquiring of proper hospital facilities and the addition of several full-time instructors to replace part time instructors, our own state medical school, the University of Arkansas School of Medicine has made advancement of which we all feel justly proud.

The number of students enrolled in each class for the current year is as follows: Freshmen, eighty-two; sophomores, sixty-three; juniors, seventy, and seniors, sixty-three, a total of 278. The enrollment for the 38-39 term consisted of more than 80% residents of Arkansas. Comparatively few residents of Arkansas are enrolled in other medical schools. The University of Arkansas School of Medicine is an Arkansas school for Arkansans.

About \$75,000 has been spent in remodeling the hospital and making additions to the school. The additions include, a new record room, two new emergency rooms, syphilis clinic, cafeteria, new kitchen and autopsy room

with a cold room which will hold about 20 bodies. Clinics in allergy, diabetes, and arthritis have also been added. A much needed course in medical economics and medical ethics has been added for seniors with six lectures given by an able physician and surgeon who has had several years experience in general practice and four lectures furnished by the School of Business Administration of University of Arkansas at Fayetteville.

The University Hospital has for the past several months averaged about one hundred and seventy patients. A consulting dietitian has been added to the hospital staff and a nurse anesthetist assumed her duties March 1st. A business manager in charge of both the school and hospital has been added to the administrative personnel.

Postgraduate Medical Study

Opportunities for continuation of medical study were given during the year by:

First. Refresher course in obstetrics held in five towns in different parts of the state, one session in each town each week for six weeks. This course was sponsored by this Society and the Arkansas Board of Health. The course was given by a recognized authority from an out of state school. All licensed physicians were eligible to attend. The expenses of the course were borne by U. S. Children's Bureau and State Board of Health. Approximately 225 physicians attended the course.

Second. A postgraduate assembly was held at the University of Arkansas School of Medicine lasting 2 days twice each year, 2 days in January and 2 days in October. This is also sponsored by the society and a more detailed report will be given by the committee responsible for this course. Your committee believes much has been accomplished by both these courses but feels that the attendance is not as large as it should be. We believe it is the duty of every member of this Society to make every effort to increase attendance at these courses. We heartily recommend their continuance.

A letter from the Dean of the School of Medicine was referred to this Committee a few months ago by the Secretary of the Society concerning an eclectic physician who is licensed to practice in Arkansas who had asked permission to audit lectures in the medical school over a period of months. We replied by saying, "We are of the opinion that such a desire upon the part of Dr.

_____ or any other physician, is to be commended and, if after consulting the Council on Medical Education and Hospitals of the American Medical Association, such request can be granted without endangering the standing of the school, we see no reason why his request should not be granted."

Hospitals

The hospital situation is being much discussed at this time because of a proposed plan of the Federal Government to build hospitals. A bill has been introduced in Congress to appropriate funds to make an experiment by erecting such in communities where they are needed. This proposed plan stipulates that the community operate and support, without further aid from the Federal government, such hospitals according to the standards established by the Federal government. On January 4, 1940, this committee met with the President and Secretary of the Society, the State Health officer, and representative of the hospital organizations of the state, for the discussion of this proposed plan. It was the consensus of opinion expressed at this meeting that there are no communities in Arkansas where hospitals do not now exist which could comply with the requirements and sup-

port, according to standards set by Federal government, such hospitals. It was further suggested that if the amount of money proposed could be made available to care for indigent patients or patients who are in low income group, in well established existing hospitals, much more could be accomplished in taking care of those who need and do not receive hospital care. There is not a county in the state that does not have a hospital within its bounds, or accessible in an adjoining county; and, with improvement of roads and ambulance service, what was once impossible in the way of transporting patients several miles to a hospital, can now be safely and easily accomplished. Many of the existing hospitals are not up to such a standard as would be set by a Federal government hospital. They do not have staff organizations, laboratory facilities, recognized dietitians, etc. Some do not rate being recognized by the Council on Hospital and Education of American Medical Association. Some do not even call themselves hospitals, but they are taking care of sick people and doing a noble work in the various communities. If these existing institutions could be assured that they would collect from all patients accepted it would enable them to increase their capacities and add equipment which would enable them to give more efficient service.

It was also the opinion of those present at the conference that the medical profession and hospital associations should be consulted as to location and size, if and when, such hospitals should be built. Your committee believes the medical profession is successfully working out the hospital situation in our state. No group is more interested in furnishing hospital facilities to the people of Arkansas than the physicians and surgeons of the state. Many attempts have been made by physicians at no little expenditure of money to establish hospitals. Some of these attempts have failed and such hospitals have been closed; others have been successful and these have been, and are being, enlarged, or new buildings erected as the proven need of such facilities appear.

Your committee has purposely omitted from this report statistics of the number of hospitals, number of beds, number of unoccupied beds, etc., in the state. These were omitted because we believe such figures would prove we do not need additional hospital beds and because we believe such conclusion would not be wholly true. Hospitals which are serving some communities in the state are in need of more beds and it is more or less a community problem to furnish them. In every instance the support or upkeep of a hospital is more of a question than the building of one. Some attempts are being made to help in this matter by hospital pre-payment plans. It remains to be seen how these plans work. It seems quite probable that they will be successful in the larger centers or in industrial centers, but we doubt the workability of such a plan in rural sparsely settled communities. The State Hospital for Nervous Diseases at Little Rock and Benton still continues to be crowded and in need of more room.

The State Tuberculosis Sanatorium at Booneville has been much improved during the year. The building program which will enable them to care for about 700 patients is being completed but with a "waiting list" of 600 patients there is still need for room. Your committee is of the opinion that these last mentioned institutions, the State Hospital for Nervous Diseases and the State Tuberculosis Sanatorium should have first consideration on any Federal appropriation to build in Arkansas.

COMMITTEE ON PUBLIC RELATIONS

W. T. WOOTTON, Chairman

Your committee on Public Relations desires to call attention to clippings from 90 papers representing 75 towns or cities in Arkansas, in which an effort has been made to directly contact the layman with medical briefs that might tend to divert his mind away from patent medicine, and make him conscious of what the doctor is doing to protect him and his children.

This committee would especially commend the profession of Johnson county for their organized effort aimed at educating their fellow citizens as to the whys and wherefores of organized medicine.

We would call attention to the educational program shortly to be inaugurated by the state committee for lowering the mortality in appendicitis, which will be under the auspices of this society, and released through this committee.

This committee will welcome suggestions from the membership that may help the society to better get our message to the public.

COMMITTEE ON MEDICAL ECONOMICS

J. G. GLADDEN, Chairman

The committee recommends:

I. The expansion of public health, maternal, and child health services and that expenditures for the expansion of this service should not be for the treatment of diseases except where it could not be accomplished through the private practitioner.

II. The committee favors the expansion of hospital facilities where need exists. The hospital situation would indicate that there is at present greater need for the use of existing hospital facilities than for additional hospitals.

The government should consider well its location of hospitals in its building program. It would not be wise to build a hospital in a poor section of the state, without providing maintenance, which is the greater problem.

III. We advocate that the care of the indigent is a responsibility of the state and national government and not just the medical profession, and that such care should be organized by government units and supported by state and Federal funds.

IV. We approve of the principle of hospital service insurance which is being widely adapted throughout the country, as in Pulaski County, but we recommend that such insurance be a community project. The program that would work well in a city of 50 or 100 thousand might not be practical for a city of 5,000. The group hospitalization plans should be confined to hospital facilities and not to any type of medical care. Insurance plans should have the approval of the county and state societies before they are given consideration.

COMMITTEE ON SCIENTIFIC EXHIBIT

C. S. MOSS, Chairman

Chas. S. Moss called attention to the extensive scientific exhibit on the mezzanine floor of the hotel and asked all members to visit it at their leisure. Dr. Moss expressed thanks to Dr. Weddington for cooperation in setting up the exhibits.

COMMITTEE ON NECROLOGY

L. T. EVANS, Chairman

L. T. Evans made announcement concerning the Memorial Service to be held Tuesday morning. Following general discussion as to the place of meeting, the Society voted that the memorial session be held in the hotel as originally planned.

REPORT OF COMMITTEE ON CANCER CONTROL

FRED H. KROCK, Chairman

Your committee on cancer control wishes to submit the following report:

In accordance with the recommendation made by this committee in 1939 that the committee be increased from three to five members, action was taken by the Arkansas Medical Society, and President Buchanan appointed the two extra members, thus affording an increased spread of foci throughout the state from which information on cancer might emanate. Through funds provided by the Women's Field Army campaign of 1937 the committee was able to purchase a film projector and several rolls of film for lay education. Three such projectors and sets of film are now available for use whenever requested.

A large number of booklets for public distribution have been purchased and used at various public meetings, and supplies provided for the coming campaign of the Women's Field Army.

The Auxiliary again voted to sponsor the Women's Field Army, and Mrs. S. J. Wolfermann of Fort Smith was selected by it's President, Mrs. C. E. Kitchens of DeQueen, as State Commander. Plans have been formulated for an active campaign in at least one center of each of the ten councilor districts throughout the state. While hope is expressed that the campaign will be successful from the standpoint of raising sufficient funds to more actively prosecute this educational program throughout the state in the coming year, nevertheless it has been gratifying to note the amount of publicity that has been secured so far and its effect on making the public cancer conscious.

Dr. F. A. Hughes has resigned from our committee because of moving to Tennessee. He requests the appointment of another member to take his place.

From a general standpoint, the situation concerning diagnosis and treatment of cancer is unchanged. There has been considerable newspaper publicity accorded to the refrigeration method of treating cancer. The originators of this method have not claimed anything for it from the standpoint of therapeutic results. It apparently offered another angle from which the problem of malignant disease might be studied, and while there was a definite arrest in the growth of malignant cells during the stage of freezing, recent reports indicate that following this temporary remission that the growth was greatly increased.

Your committee still feels that the two important phases of cancer control concern education of ourselves in the early recognition of cancer or precancerous conditions, and getting the information over to the public regarding the fact that early cancer is curable, and that when certain danger signals are present that the family doctor should be consulted and pass on their significance.

We would also recommend that a vote of thanks be offered to the Auxiliary for their co-operation in sponsoring the Women's Field Army, in order that we might further both the above aims.

HEART COMMITTEE

A. A. BLAIR, Chairman

Cardiovascular disease is still the number one killer in the United States. The interesting work of Crile, and that of Allen and Adson, of the Mayo Clinic, recently reported at the American College of Physicians' meeting in Cleveland ten days ago on the surgical treatment (sympathectomy) of early essential hypertension, may be a step forward in lowering mortality rates from hypertensive heart diseases.

Your committee is in agreement with the opinion of Doctor Paul White, who thinks the greatest advance of all time in the study and treatment of heart disease has been the clear differentiation of heart disease into its various types or kinds. This permits of the proper understanding and treatment of individual cases on an etiological basis and establishes a foundation on which to build up the campaign of prevention of these causes.

With this in mind we have undertaken a partial survey of heart disease in Arkansas from the standpoint of etiology as it has occurred in the hospitals during the past five years in each of the four cities where individual committee members reside, namely, Little Rock, Hot Springs, Fort Smith and Fayetteville. We found that many records were inadequate, either in the history or final diagnosis, to arrive at any conclusion as to their classification in this study series from the standpoint of etiology, and as the result, quite a large number had to be discarded.

From this record, however, we are reporting 4,175 cases. Of this number 1,332 or 31.8% were classified as arteriosclerotic heart disease, 1,259 or 30% hypertensive, 655 or 15.6% luetic, 665 or 15.8% rheumatic, 97 or 2.6% thyrotoxic, 27 or .6% congenital, and 140 or 3.6% all other types, which take in those of simple arrhythmias, cardiac murmurs, bacterial endocarditis, traumatic lesions, etc.

We were impressed with the great need for more uniform classification of heart disease if our records are ever going to be worth anything. Every physician and hospital should adopt standards of classification and diagnosis set up by the American Heart Association, because they have given this problem more individual study than any other organization, and this we respectfully urge.

STUDY OF MIDWIFERY

J. B. JAMESON, Chairman

At our last annual meeting your Committee on the Study of Midwifery, with our incoming President as Chairman, gave us a very graphic and vivid picture of the history of midwifery through the ages. As you will recall the Committee called attention to the fact that in the early ages all, or nearly so, of the deliveries were attended by midwives, or were left alone, not unlike the animals. In either case the results obtained might have compared very favorably with our present day tendencies to meddle with nature. The report also pictured the doctors transition, slow as it was, into the field of obstetrics. It went into detail and statistics in order that you might be aware of the number of deliveries in these United States attended by midwives. As I recall, it showed that approximately 70% of all negro births were so attended, and 6% of all white births in the state of Arkansas. The Committee also made some broad suggestions as to the proper training of midwives.

Truly it was a comprehensive groundwork or foundation upon which your present committee has been challenged to do something to correct conditions as we find them today.

We are aware that certain suggestions will perhaps overlap with plans of other committees on kindred subjects, but we feel that doubling our efforts will, no doubt, give greater emphasis to the needs.

The first question, as the committee sees it, is whether or not the State Board of Health should or should not continue to issue permits to midwives. Although no legal action can be taken to force any one practicing midwifery to apply for a permit, nor can prosecution be had for practicing midwifery without a permit, it is felt that without any restrictions conditions would become even worse than at present. The age old "bluff" coupled with ignorance as to the law no doubt creates some restrictions.

In this connection we feel that perhaps the time is not yet ripe to request any legislative action with teeth to enforce it, but it is at least our duty to begin a campaign to that end, with the ultimate goal to be desired being, midwifery done by a graduate nurse from the office of or under the supervision of county health unit, to be paid from state and government funds.

Since most of the doctors of the state are either very busy men, or in many instances unfamiliar, with the qualifications of an applicant for a permit to practice midwifery, and do not have or take the time to check into her record or knowledge of the work done by the applicant, we feel that all applications for permits should be signed by the county health nurse or the county health doctor; and then only after a thorough check as to her ability. We feel that these permits should be on an annual basis. A record of babies delivered by midwives should be kept in the office of county health unit in order to study the results obtained by each midwife of that particular county. In this way many undesirables can be eliminated.

Since the State health unit is always under the supervision either direct or indirect of the state medical society and in a way subservient to its wishes, and each county unit bears a like relation to the county society, it is our belief that each county society after a careful study of conditions existing within its own boundaries should encourage, cooperate with and request its health unit to establish and conduct prenatal clinics of all indigents. A survey should be made of the personnel of the county societies to determine who would be willing to see and treat any case which might prove to be abnormal in any way. We feel that there are good men in each county especially among the younger men, who would volunteer to devote some of their time to these clinics—on rotating services.

We feel that the same could be worked out in regard to teaching by lecture and demonstration the midwives of the county. Rotate the volunteers and have classes at certain intervals, say once per month, on Saturday, as they all come to town then anyway. The same thing could be accomplished by assigning certain groups to certain doctors for instructions. It is our understanding that money is available for part time lecturers by either local doctors or some one furnished by State Board of Health.

It is also our opinion that the county chapter of the American Red Cross should be asked to furnish all midwives with kits or bags containing all the essentials needed

—these bags are made and furnished according to the specifications and under the supervision of the State Health Board. Garland County is doing that, and perhaps others. It is a very striking and significant thing to note that these bags do not contain any gloves, hypodermic syringes or drugs for oral administration. A picture of bag furnished the Garland County chapter to midwives is attached to this report.

So we, your committee, beg to recommend to the House of Delegates the following:

1. That the Arkansas State Board of Health continue to issue permits to practice midwifery, but only to those whose applications are signed by either county health doctor or county nurse.

2. That in all counties where the society has so requested, prenatal clinics be established for indigents to be conducted by the county health doctor or by some one of the local society.

3. That in those counties so requesting, a series of instructions be given to both midwives and to those desiring permits, such lectures and demonstrations to be given by the personnel of county health unit, the local doctors as part time lecturers or by others designated.

4. That "A Manual for Teaching Midwives" by the Children's Bureau of the U. S. Department of Labor, be used as uniform text.

5. That the county society request the county chapter of the American Red Cross to furnish bags equipped to midwives.

6. That the councillor from each district or some one designated by him contact county societies in his district to encourage them to adopt and sponsor this program.

7. That in those counties without active medical societies the county health unit be instructed to inaugurate this work.

MATERNAL AND CHILD WELFARE COMMITTEE

S. A. THOMPSON, Chairman

During June and July, 1939, this committee, in cooperation with the State Health Department, helped to carry on a refresher course on obstetrics. This was presented at Prescott, McGehee, Conway, Jonesboro and Fort Smith for six weeks on the circuit plan. Dr. H. Close Hesseltine, of the Chicago Lying In Hospital, conducted the course in a scientific and practical way very helpful to all of us. The attendance in this review was better than in the past but still not what it should have been.

This year we are to have pediatrics again. We feel very fortunate that Dr. Jean V. Cooke, Dept., Pediatrics, Washington University, St. Louis, has consented to a return engagement. Those of us who heard him in 1938 will be eager to hear him again. There will be no repetition of the 1938 work. Those who miss this series will pass up a great opportunity. This course will start in Fort Smith, May 20th; Prescott, May 21st; McGehee, May 22nd; Searcy, May 23rd; Jonesboro, May 24th, and on the same day each week at each place at 7:30 p. m., for six consecutive weeks. Please make plans now for your attendance.

At an official meeting of the Council in Camden, October 5th, this committee was given authority to proceed with plans to secure a full time instructor in obstetrics and to present our objectives to the House of Delegates here for final approval.

This instructor's work will be entirely with the profession and must be sponsored by the county and district society in which it is done. The work will consist of lectures, demonstrations, clinics and consultations, depending on the desires and needs of the profession in the section being served. The instructor will see no private patients or in any way interfere with private practice. You may, if you desire, call him in consultation in private practice, when he happens to be in your town or community. He will not be permitted to accept a fee for such consultation. He will receive no fee of any kind. His salary will be paid by the State Health Department, entirely without cost to the profession or this society. At a meeting in Dr. Grayson's office in Little Rock, in January, Drs. Clyde Rogers, Chairman, W. R. Brooksher, W. B. Grayson, E. H. White and B. J. Reeves were asked to investigate the available men and tentatively select one who might fit into this program. This has been done and we thank them for their work. We earnestly urge the approval of this suggestion by the House of Delegates, as we consider it marked progress in maternal care.

In January, 1939, in cooperation with Dr. W. Meyers Smith, of the State Health Department, an investigation was started as to why we have about the highest maternal mortality rate of the nation, here in Arkansas. A questionnaire was printed asking for all possible details regarding maternal deaths and when such a death certificate came into the Bureau of Vital Statistics this form was mailed to the doctor who signed it. The response has been excellent and we urge your continued cooperation. We expect to have a complete analysis of this material to present to you in 1941. We are confident that the members of this society will be vindicated when that is done.

This committee appreciates the help given us by our state secretary, Dr. Brooksher, the State Health Department, Dr. Grayson and Dr. Smith, also Dr. White and Dr. Reeves.

CONCLUSIONS

1. In the first six months of the study 60% of the questionnaires were returned, and in the following year 90% were returned, a total of 78% answers, which shows excellent cooperation by the physicians of the state.

2. A total of 159 deaths is still too few to draw many definite conclusions from. The study should be continued.

3. More detailed information should be obtained on some of the cases, perhaps through personal contacts by members of the Maternal Welfare Committee or the State Health Department staff with the attending physicians, midwives, or with the family.

4. Since only 18 blood Wassermanns had been taken on these 159 patients, it seems apparent that it is not yet general practice in Arkansas to obtain routine Wassermanns on maternity cases.

5. Since midwives had been present in only 35 of the 159 cases, it does not seem that they are a major factor in maternal deaths; however, a few reports clearly indicate their direct responsibility.

6. Only 25 or 16% of these cases received any semblance of prenatal care and less than half of these approached adequacy. Without knowledge of the amount of prenatal care given the living cases it is not possible to draw conclusions as to the importance of this factor in these deaths. Yet it seems significant that toxemia which was the leading immediate cause of these deaths is preventable by prenatal care.

7. Prenatal care is particularly lacking for midwife cases and for negroes.

8. Comments on several reports indicate that prenatal care should be made available for such cases and that there is need for education of the public to prenatal care.

COMMITTEE ON POST-GRADUATE INSTRUCTION

D. A. RHINEHART, Chairman

The Committee on Post-Graduate instruction has performed its functions to the best of its ability. At every meeting the committee has held it has been the decision that two short programs be provided each year rather than one longer period, and that these be held in the Medical School in Little Rock. During the past year these two meetings were held, the first on October 10 and 11; the second on Jan. 24 and 25.

At the meeting held in October the guest speakers were R. Lee Hoffman, a urologist of Kansas City, Mo.; Dr. Paul F. Stookey, an internist of Kansas City; Dr. E. V. Allen, a specialist on vascular diseases from the Mayo Clinic; Dr. Robert L. Schaefer, an endocrinologist from Detroit, Michigan, and Dr. Paul Williams, an orthopedic surgeon from Dallas, Texas. The list of specialists will speak for the general character of the discussions that were presented. The rest of the program was filled by speakers from Little Rock and Fort Smith.

In connection with this program an open house was held at the Medical School and the University Hospital for the visiting physicians and the laymen of the community and state. All the departments of the school and hospital, and many of the other medical institutions prepared and exhibited material illustrating their particular work.

At this meeting the attendance of visiting laymen was all that could be desired. The school and the hospital were thronged all day with visitors. About 115 physicians from the state registered for the Post-graduate course.

At the meeting held in January, Dr. Charles F. Geschicter, pathologist, of Johns Hopkins Hospital, Baltimore; Dr. Ferdinand C. Helwig, also a pathologist, of Kansas City, and Henry H. Turner, an internist of Oklahoma City, were the guest speakers. The program was completed by members of the medical school faculty. A symposium on low-back pain was the feature of this program; the rest was of general character.

A special effort was made to get physicians from the state to attend this meeting. This effort even extended to their wives, who were specially invited. An attempt was made to entice them with special gifts and bargains at the stores, a party in the afternoon and a dinner and another party at night. Possibly because of extremely bad weather, and acute respiratory diseases in the state amounting almost to an epidemic, the attendance was less than one hundred.

At the meetings held during the last year, as at all the other meetings the Committee has sponsored and arranged, the attendance has been disappointing. Inspectors from the American Medical Association, Council on Education and Hospitals, have told the Committee that the programs have been the equal of those given elsewhere, but that the attendance has been less than that at other similar meetings.

The Committee has recently made a survey of the attendance at the eight post-graduate meetings it has held. The result of this survey is shown on a large map

ment clinics. These were given on request from physicians.

During 1939 the following amounts of anti-luetic drugs were distributed by the state health department:

Neoarsphenamine.....105,870 doses of 0.6 Gm. size
Sulpharsphenamine..... 1,705 doses of 0.1 Gm. size
Sulpharsphenamine..... 1,810 doses of 0.4 Gm. size
Bismuth.....156,120 cc's

There was a 10 cc. ampoule of distilled water distributed per dose of neoarsphenamine and per dose of sulpharsphenamine. Also, 18,600 wax ampoules of silver nitrate distributed.

The State Hygienic Laboratory performed the following tests:

Blood Wassermann, 30,272 positive, 63,800 negative.
Spinal fluid Wassermann, 158 positive, 311 negative.
Smears for gonorrhea, 469 positive, 1,249 negative.

In February 1940 the United States Public Health Service called a conference in Atlanta to discuss venereal disease control activities in the southern states. Resolutions adopted by this conference will be acted upon by this department.

The Committee wishes to call your attention to the practice of giving transfusions where there has only been a Kahn or Kolmer serological test done. Moore states that it is not sufficient to obtain a negative Wassermann from the donor. One must ask two questions: "Have you ever had syphilis," and "Have you recently, or have you now, a genital sore of any description." The genitalia should be inspected.

We also wish to call to your attention the necessity for individualizing the treatment of late and latent syphilis, especially syphilis after five years of infection.

We feel that our Department of Health is carrying on an intensive campaign for the control of syphilis. While doing this they always consider the interest of the medical profession.

COMMITTEE ON HISTORY OF THE ARKANSAS MEDICAL SOCIETY

FRANK VINSONHALER, Chairman

Frank Vinsonhaler related the progress of compiling the history of the Arkansas Medical Society, stating that data as now assembled had been given to the secretary.

LIASON WITH THE ARKANSAS TUBERCULOSIS ASSOCIATION

A. C. SHIPP, Chairman

Your committee on Liason with the Arkansas Tuberculosis Association reports that the relations between our societies have been most cordial and the coordination of our respective programs has been satisfactory to both groups.

The Arkansas Tuberculosis Association was organized by the Arkansas Medical Society in 1908 and has been sponsored by this society ever since. In 1938, at the request of the Tuberculosis Association, a Liason Committee was appointed by the medical society for the purpose of a closer affiliation and a more complete coordination of programs. While distance from Little Rock, has during the past year, prevented the committee as a whole from meeting with the board of directors of the Tuberculosis Association, the chairman has been present at all meetings and has been consulted and advised with about projects and program which was submitted in writing to all members of the committee and approved.

The Tuberculosis Association in 1939 discontinued holding county tuberculosis itinerant clinics as this work was taken over by the State Board of Health as a part of the public health program. The Tuberculosis Association continued in case finding work and the educational field. The past year saw an outstanding piece of work in collaboration with the State Department of Education organizing the negroes in the antituberculosis fight. This work won national recognition as the outstanding piece of work in the inter-racial antituberculosis movement in the United States.

In 1940 the Tuberculosis Association proposes to carry on the same general program as last year with an added project of building a working library for the two tuberculosis sanatoria, which work they are asking the Women's Auxiliary to the Medical Association to sponsor.

We find the Arkansas Tuberculosis Association has always worked in harmony with the state medical society, has wholeheartedly indorsed and respected in theory and practice the ethics of our profession and in the present unsettled state of medical economics, is in accord in principle with us in our opposition to state medicine and is actively in favor of the basic science law. We, your committee, recommend that the Arkansas State Medical Society and its affiliated county societies continue to support and cooperate in carrying out their program.

THE REPORT OF THE SECRETARY OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY TO THE SIXTY-FIFTH SESSION OF THE ARKANSAS MEDICAL SOCIETY IN FORT SMITH, APRIL 15, 16, 17, 1940

I herewith submit for your approval the action of the State Medical Board of the Arkansas Medical Society since the meeting in Hot Springs, May, 1939.

There were sixty-eight applicants up before the Board during 1939 for examination, all passing the examination satisfactorily and were issued certificates to practice medicine in the State of Arkansas.

There were eight applicants for the primary examination, all of whom made passing grades.

After submitting the necessary fee, twenty-eight were certified to various other state boards the past year.

After having presented satisfactory evidence of graduation from reputable medical schools and having complied with all the necessary requirements of the law, twenty-one applicants were issued license by reciprocity, which is less than half the number that came into the state last year by reciprocity.

Since our last report we have added two new states to our list with whom we have reciprocal agreement, namely, South Dakota and Maine. This brings the number of reciprocal states up to thirty-five.

Further, I wish to recommend to this body that there be an annual registration fee of \$1 or \$2 per physician, per year, or, whatever amount necessary to carry on such type of work for which this fee should be used. This amount should be used or set aside in a fund for any purpose which the Board might have need. Up to the present time, the Board has never had any fund from which it could publish or print the Arkansas Medical Practice Act in booklet form. Most all of the other states have their medical practice act printed in booklet form

so that these may be interchangeable with other states. Seldom a week passes that my office does not have a request for this act.

Annual registration would also give us a check on all physicians in the state. At the present time, we have around 1,800 to 1,900 physicians in Arkansas, with only about 1,000 belonging to the Arkansas Medical Society, leaving about 800 physicians that your Society and the State Medical Board of the Arkansas Medical Society knows nothing about. Therefore, we have no way of keeping track of these physicians without an annual registration. Each week my office receives inquiries from different state boards, from the American Medical Association, and various other sources as to the whereabouts of physicians who are supposed to be practicing medicine in our state. There are a great number of these inquiries that cannot be answered satisfactorily due to the fact that our files on these physicians are not complete, as to location, etc. The files of the State Board of Medical Examiners can never have a complete roster of the members of our profession in this state without annual registration of all our physicians.

Your Secretary attended the meeting of the Federation of State Boards in Chicago, February 12 and 13 of this year, at which time many interesting facts were learned and discussed. One of the most interesting and probably the most difficult and far-reaching problem was that of the refugee physician. Arkansas, as you know, is well in advance of the majority of states in handling this question, as our law is very specific in the requirements set forth. In order to be licensed to practice medicine in Arkansas, either by reciprocity or examination, applicant must be a citizen of the United States.

Your Board has spent untiring efforts to keep undesirable men from coming to our State through either channel, reciprocity or examination. Up to this time this has been, we feel, about 100 per cent efficient.

REPORT OF THE DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION

E. E. BARLOW

E. E. Barlow made general remarks concerning the operation of the House of Delegates of the American Medical Association, calling attention to the fact that most states are represented in that body by delegates who have served continuously for five to twenty-five years, thereby acquiring an influence which permits them to best serve their state society. He also directed attention to the fact that expenses of these delegates was paid by the constituent state societies inasmuch as the work of the House of Delegates practically precludes the delegate from attending the scientific sessions of the Association. By motion the report of the 1939 sessions as reported in The Journal of the Arkansas Medical Society was adopted.

REPORT OF THE COUNCIL

R. B. ROBINS, Chairman

On October 5, 1939, the Council met at Camden on the occasion of the meeting of the Fifth Councilor District Medical Society. The report of the Committee on Compensation Payments (WPA) was adopted. Reports were heard from the following committees: Medical Legislation, Joe Shuffield; Scientific Exhibit, C. S. Moss; Scientific Work, R. B. Robins; Postgraduate Study, D. A. Rhinehart; Liason With Arkansas Tuberculosis Association, A. C. Shipp; Study of Midwifery, J. B. Jameson;

Maternal and Child Welfare, S. A. Thompson, and Health and Public Instruction, W. B. Grayson. The Legislative Committee was requested to endeavor to secure repeal of Act 161. The Committee on Maternal and Child Welfare was authorized to arrange, if possible, for a full-time instructor in obstetrics. A committee was appointed to investigate the advisability of the Society providing a scholarship or award in the University of Arkansas School of Medicine.

The Council met in Little Rock, December 8, 1939. A plan was approved providing for the FSA to conduct a physical and mental survey of their clients in one selected county provided it was approved by the county selected. The platform of the AMA was approved at this meeting.

On December 26, 1939, through death, the Council lost its Chairman, Dr. Val Parmley. Dr. Parmley's valuable service to organized medicine for many years was well known to the doctors of this state. He will be greatly missed in the Council and by his many friends. It is hoped that the Arkansas Medical Society will find some appropriate way to memorialize his name to the profession, because his wonderful life of service to organized medicine justifies it.

On January 24, 1940, there was a called meeting of the Council in Little Rock. Dr. F. A. Corn, Jr., of Lonoke was elected Councilor from the Eighth District to fill the unexpired term of the late Dr. Val Parmley. Your speaker was elected Chairman of the Council. No other business was transacted.

REPORT OF THE TREASURER

R. J. CALCOTE

Balance reported at last annual meeting,

May 8, 1939\$12,226.46

Receipts during year:

July 29, 1939—Received of secretary account of dues\$1,500.00

July 29, 1939—Received of secretary account of Journal 1,500.00

Jan. 9, 1940—Received of secretary account of Journal 3,500.00

Interest on savings account 61.92

Total receipts during year 6,561.92

Total funds available during year\$18,788.38

Disbursements during year, vouchers Nos. 1016 to 1106, inclusive 8,179.07

Balance on hand at close of business,

April 13, 1940\$10,609.31

REPORT OF THE SECRETARY

The paid membership of the Society today is 911; at the 1939 annual session it was 995. Total membership for 1939 was 1,076 as compared with 1,067 in 1938 and 1,072 in 1937. By constitutional amendment adopted at the 1939 session, members whose annual assessment of membership is not paid by April 1st of each year become delinquent and ineligible for election to honorary membership in subsequent years.

The percentage of members of the Society who qualify as Fellows of the American Medical Association remains too low. Only by payment of fellowship dues can our members actively support the program and activities of the national organization. There is imperative need at

this time that the unity and force of organized medicine be demonstrated by numerical strength.

The Society received as payment of membership assessments in the period May 1, 1939, to April 1, 1940, \$4,515; from the sale of advertising in The Journal of the Arkansas Medical Society, \$6,256.51; as a refund from the Garland County Medical Society (excess receipts from the commercial exhibits over the cost of the 1939 annual session to the host society), \$83.74, and from restricted deposits, final payment, in banks, \$199.79, a total income of \$11,055.44.

During the year your secretary has attended the session of the American Medical Association, the Conference of State Society Secretaries, the meetings of the Council, five councilor district society meetings, seven committee meetings, a number of county society meetings, and has addressed nine lay groups.

Under the direction of the Committee on Public Relations the weekly Health Talks of the Society have been distributed to the newspapers of Arkansas, approximately 100 of which regularly publish the talks. With the active cooperation of the members in those cities and towns where the talks are not now published, it is possible to materially increase the outlets for this educational service.

The desirability of combining county medical societies for greater scientific service to the members remains in several sections. Smaller societies are not able to provide a sufficiently large audience, nor to attract the programs which a combined organization can do. It is urged that steps be taken toward this in 1940.

Your officers and committees have been most active in the past year as reports presented indicate. With the whole-hearted support of the membership, greater effort is possible, with hope of increased benefit to the members.

For the kindly assistance of all during the year, we express our appreciation.

REPORT OF WOMAN'S AUXILIARY

To the Arkansas Medical Society in Convention Assembled, the Auxiliary presents the following condensed report:

For the year 1939-40 the Auxiliary has carried out its program through twenty-one Auxiliaries, most of which meet monthly. Two were organized this year, making a membership of more than three hundred women.

Public Relations in all of its phases has been stressed this year, meetings open to the public, speakers in all men's and women's organizations wherever practicable, Hygeia in schools and libraries, essay contests in schools.

American Medical Association outlines to be used according to local needs and conditions, along with state plans were submitted early in the year to our Advisory Board, Dr. C. K. Townsend, Chairman, asking that they be sent on to the President of the Arkansas Medical Society, Dr. A. S. Buchanan.

The year's program has also included Education and Public Health, contributions to Student Loan Fund, Observance of Doctors' Day, annual physical examinations, cooperation in all lay groups in health programs.

The President has traveled 5,200 miles in the interest of the Auxiliary, and has written 1,076 communications.

The Auxiliary functions only under the direction of the State Medical Society and always identifies itself in that way. With your assistance we earnestly hope to organize several new groups during the new year.

The Auxiliary brings greetings for a most successful

Convention for you, the grandest profession of them all.

Respectfully submitted,

MRS. CHARLES E. KITCHENS, President.

MRS. PIERRE REDMAN, Secretary.

By motion the past-presidents were requested to call on H. Moulton, absent because of illness. By motion the secretary was instructed to send flowers from the Society to Dr. Moulton.

By motion the proposed amendment was referred to the Reference Committee for recommendation.

The following Nominating Committee was selected:

First District—L. C. McVay

Second District—S. J. Allbright

Third District—J. O. Rush

Fourth District—E. E. Barlow

Fifth District—R. C. Kennerly

Sixth District—C. C. Hanchey

Seventh District—J. S. Stell

Eighth District—M. J. Kilbury

Ninth District—H. V. Kirby

Tenth District—S. J. Wolfermann.

The first session of the House of Delegates adjourned at 12:15 P. M.

FIRST GENERAL SESSION

APRIL 15, 1940, 1:30 P. M.

The meeting was called to order by President Buchanan.

The invocation was given by Rev. Fr. Jacklin.

The Society was welcomed to Fort Smith by Hon. Jim Jordan, Mayor, City of Fort Smith, and H. C. Dorsey, President, Sebastian County Medical Society.

G. L. Kimball, DeQueen, responded to the addresses of welcome for the Society.

J. M. Proctor took the chair as President Buchanan read the President's address to the Society (page 1).

The scientific program followed in order:

"Gallbladder Disease," Clifford J. Barborka, Chicago.

"Heart Disease and Work," A. A. Blair, Fort Smith.

"Vaccines and Serums in Prophylaxis and Treatment of Acute Diseases," S. G. Wolfe, Shreveport.

"The Tuberculin Patch Test: A Comparative Study of the Mantoux and the Tuberculin Patch Test," Ralph E. Weddington and W. O. Arnold, Fort Smith. Read by Dr. Arnold and discussed by Dr. Weddington.

"The National Physician's Committee for the

Extension of Medical Service," E. H. Skinner, Kansas City.

**PUBLIC MEETING
JUNIOR HIGH SCHOOL AUDITORIUM
APRIL 15, 1940, 8:00 P. M.**

The meeting was called to order by President Buchanan.

The invocation was given by Rabbi Samuel Teitelbaum, United Hebrew Congregation.

H. C. Dorsey introduced A. S. Buchanan, who introduced Mrs. C. E. Kitchens. Mrs. Kitchens introduced Mrs. Rollo K. Packard, President, Woman's Auxiliary to the American Medical Association, who spoke on "The Auxiliary."

President Buchanan introduced E. H. Skinner, Kansas City who spoke on "The Priceless American Heritage of Health And Happiness."

The Benediction was said by Rev. J. W. Hickman, First Presbyterian Church.

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Following the evening public meeting, members and guests attended "open house" by the Sebastian County Medical Society at the following locations: Cooper Clinic, Dr. T. P. Foltz and Holt-Krock Clinic.

**MEMORIAL SESSION
APRIL 16TH, 1940, 8:00 A. M.**

The meeting was called to order by President Buchanan.

The invocation was given by Rev. L. L. Evans, First Methodist Church.

Mr. Charles McGill sang "My Friend," accompanied by Mrs. Charles McGill at the piano.

E. E. Barlow read the following roster of deceased members:

IN MEMORIAM

Alvin L. Jobe, Little Rock, May 26, 1939.
Oscar Jacob MacLaughlin, Hot Springs National Park, June 2, 1939.
William Vincent Laws, Hot Springs National Park, June 8, 1939.
Thomas Lee McDonald, Hope, June 26, 1939.
James Homer Buckley, Fort Smith, July 31, 1939.
George Thomas Laman, Cave City, August 8, 1939.
Fred Raines Morrow, Fayetteville, August 15, 1939.
John H. Colay, Morrilton, August 16, 1939.
Milton Augustus Hardin, Norphlet, September 4, 1939.
Edwin Justus Haster, Dardanelle, September 24, 1939.
Ervin Layman Matthews, Morrilton, October 17, 1939.
Thomas C. Neece, Walnut Ridge, October 17, 1939.
Edwin Thomas Brown, Marvell, October 28, 1939.
Alexander Crump Kirby, Little Rock, November 4, 1939.
Frank O. Rogers, Little Rock, November 8, 1939.
William Frank Akin, Branch, November 13, 1939.
William Columbus Haltom, Jonesboro, November 19, 1939.
Lee Vallette Parmley, Little Rock, December 26, 1939.
Ernest Darnall, Colt, January 2, 1940.

James Erwin Hardaway, Lynn, January 4, 1940.
Emmett A. Pickens, Bentonville, January 29, 1940.
Jesse Clyde Graves, Lockesburg, February 2, 1940.
Thomas E. Benton, Lonoke, February 5, 1940.
William Mack Majors, Paragould, February 14, 1940.
Charles E. Hurley, Bentonville, February 24, 1940.
George Albert Causey, Swifton, March 20, 1940.
William L. Harper, Junction City, March 22, 1940.
Herman Castile, Foreman, March 29, 1940.
W. H. Estes, Sage, March 29, 1940.
Guy Arnold McCormack, Little Rock, April 6, 1940.
J. A. Heney, Marshall, April 15, 1940.

L. T. Evans, Batesville, read the Memorial Address.

MEMORIAL ADDRESS

L. T. EVANS, M. D., Batesville

Once again the dark spectre of death has cast the black cloak of mourning over the membership of the Arkansas Medical Society.

The past year has witnessed the passing of 31 of our fellow physicians. Some have been cut down in the very prime of their professional life and usefulness, others in the evening of their long and serviceable careers. They blended the splendid assets of servers and leaders. They have left behind them a heritage of duty and of work well done. They were imbued with the knowledge that personal sacrifice and abrogation is a part of a doctor's daily life, never too proud to perform the most menial duty, brave enough and wise enough to serve with wisdom and to lead with valor. They lived their lives and practiced their art according to their individual rights. We miss their counsel and their friendships, we sympathize with their loved ones who are deprived of their companionship and guidance. Among these men are some of the most loyal members of the Arkansas Medical Society. They served this Society on its Council, on the State Medical Board of the Arkansas Medical Society, and on many important committees. They were men of incorruptible personal integrity. They walked in perfect and noble self-control. All of these men believed in right, they had a profound conviction that the course of this world must be ordered in accordance with lasting righteousness, or this world's highest point of good will never be reached; that no nation can expect success in life except as it conforms to the eternal love of the infinite Lord, and pass itself in individual and collective activity according to that divine will. It was deeply ingrained in them that righteousness was the perfection of any man and of any people. Simplicity belonged to them. I need not dwell upon it, and I close the statement of these

qualities by saying that underlying all, over-reaching all, and penetrating all there was a profound loyalty toward the great King of the universe, the Author of all good, the eternal Hope of all who trust in Him.

May I say further that it seems to me that to whatever we may attribute all the illustriousness of these men, all the greatness of their achievements, whatever of that we may attribute to their intellectual character and quality, for all their successes as men, these were largely due to the moral qualities of which I have spoken. They drew to them the hearts of everyone, and particularly of those who knew them best. Their high qualities drew to them the good will of their associates in an eminent degree. They believed in them, felt their kindness, confided in their honesty and honor.

While we commemorate their virtues and their worth, and embalm their memory in our hearts, we have yet another duty to perform, and it is one we must not, dare not, ignore. It is to remember the sorrowing kindred, the fathers and mothers, sisters and brothers, the widows and orphans of our deceased.

To the 31 members of the Arkansas medical profession, in whose memory we are assembled this morning, to eulogize and pay proper homage, must our attention be turned. Our medical heroes, dead or alive, are never remembered by the people as the heroes and soldiers, dead and alive, in the way of public praises and ovations following and during conflicts of warfare, nor with the engulfed admiration of movie sirens as they make short stop-overs in some of our heavily populated centers. Such honors never befall the silent, tireless and consistent laboring doctors while fighting the battle with life and death, day in and day out, whether it be in the immaculate rooms of a hospital or in the humble home of some poor worker, until at a time following so many deaths, we gather in this modest way, with bowed heads, with sad hearts, to memorialize our dead confreres.

I do not believe that there is a quotation or verse more fitting, more appropriate, and so true as that of our literary friend, Thomas Gray, in his "Elegy Written in a Country Churchyard:"

"The boast of heraldry, the pomp of power,
And all that beauty, all that wealth e'er gave,
Awaits alike the inevitable hour—
The path of glory leads but to the grave."

Death is sad, very sad, and while it may seem that the cloak of modesty is being ignored, yet it seems impossible to refrain from saying that

death is particularly sad when the Grim Reaper snatches away the life of an element of our people whose mission on earth, and whose devotion to duty, are designed not only for the prolongation of the lives of the people, but whenever possible, for the prevention of death; that element of human intelligence with a trained conception of medical and surgical knowledge who night and day wage a terrific fight, not only against a visible enemy, but against an enemy unseen, unheard; against nature and against death. Said a great American physician at a recent session of the American College of Physicians in New Orleans, "scientific knowledge cannot be dispensed in boxes and crates as a market commodity, but knowledge can only emanate from skilled hands, schooled and keen minds, honest hearts."

These good doctors, all of them members of the Arkansas Medical Society, whose deaths we are assembled here this morning to chronicle and to share like sorrows, were physicians and surgeons actively engaged in their respective callings in the last year, and I point with satisfaction that most of them were known to me. Many of them were my best friends. Many of the deceased group were friends as a result of acquaintances made at various medical conventions and while serving with them on the Council and The State Medical Board of the Arkansas Medical Society. In reviewing the roll with a glance we note the ages they had attained, ages yet filled with such pronounced activities and usefulness to their country, and yet realize as George Hebert so plainly, so sadly versed:

"Flesh is but the glass, that holds the dust,
That measures our time, which also shall
Be crumbled into dust."

And yet, in the lands above, these medical warriors have joined other souls, hand in hand, shoulder to shoulder, heart to heart, all for the everlasting common cause, reviewing their earthly labors so often performed without any thought of compensation, so often prompted by the love of their sacred calling and the satisfaction they were rewarded in the realization of a work well done. This is the picture and status of the medical profession with its many ideals, unparalleled in all other professions, trades or vocations. It is universally recognized that we often work without remuneration. Think of the many charity hospitals of the country, the so many other eleemosynary institutions, medical leagues, medical health units, and various public health departments of the land which are conducted only

by medical and surgical men of a country with such tasks and responsibilities attached. All of this carries with it little, if any compensation, and all of this is regardless of the many sacrifices we are called upon to do in private practice, when so many indigent sick and helpless, who are all as human as any of us, demand our services.

Think also of the little thought which is being given to the number of years the doctor must devote to his preparation, regardless of the financial aspect, before he is capable of handling the lives of humanity, years of young manhood and womanhood, studiously bent over textbooks, absorbed in various laboratories, with the years slipping away while he reaches and searches for all the knowledge and skill which it is humanly possible to acquire, years when other young men and women are enjoying their youth, or are branching out into some other field of adventure, years when the medical student is immersed in the deep mysteries of the human body. Again we realize the public spiritedness, the civic energy which has always been in the minds and hearts of our doctors.

The organized medical profession have always been frank and honest with the public. When any thing new of value is discovered it is made known to our fellow doctors so it will be of more benefit to the public at large. Think of the work that has been done in the chemical laboratory with its sulfanilamides and pyridines, the X-ray with its so many technics and diagnosis and therapy, are all being perfected and the people are reaping the benefits through the doctors.

Yes, the world is better because these departed colleagues lived. So exalted was their character, so noble and unselfish their ambitions, that life gave them up reluctantly and death was proud to take them. But death cannot take from us the memory of what they were and what they did. Men come and go; they live forever in the hearts of their fellowmen, who truly loves and serves his brotherman.

"So I am glad—not that my friend has gone,
But that the earth he laughed and lived upon
Was my earth too; that I had closely known,
And loved him, and that my love I'd shown.
Tears over his departure? Nay a smile—
That I had walked with him a little while."

Their work here is finished. Their enfranchised spirit has departed hence to join in sweet and perfect harmony and comradeship that innumerable host of immortals who wrought faithful

and well here, and who are enjoying their just rewards on the other shore. Peace to their ashes! Honor to their names! Immortality to their memory!

Mr. Charles McGill sang "In My Father's House are Many Mansions," accompanied by Mrs. Charles McGill at the piano.

The benediction was said by Rev. Elbert Hefner, Central Presbyterian Church.

SECOND GENERAL SESSION

APRIL 16TH, 1940, 9:30 A. M.

The Society was called to order by President Buchanan.

The scientific program proceeded in order.

"The Management of Normal Labor," G. L. Kimball, DeQueen, discussed by I. F. Jones, Fort Smith.

"Treatment of Heart Diseases," S. C. Fulmer, Little Rock.

"The X-ray Examination in Ileus and Intestinal Obstruction," I. H. Lockwood, Kansas City.

"Carcinoma of the Stomach," Henry G. Hollenberg, Little Rock.

"The Treatment of Functional Uterine Bleeding," Fred H. Krock, Fort Smith.

The afternoon session convened at 1:30 P. M., President Buchanan in the chair. The scientific program proceeded in order.

"What do the Ophthalmologist and General Practitioner Expect of Each Other," Meyer Wiener, Saint Louis.

"Liver Function in Surgical Disease," Carl A. Rosenbaum, Little Rock, discussed by M. J. Kilbury, Little Rock.

"The Climateric: Some Phases in its Management," William P. Sadler, Minneapolis.

"Surgical Relief of Pain," J. Jay Keegan, Omaha.

"The Diagnosis and Treatment of Ectopic Pregnancy," Berry L. Moore, El Dorado, discussed by J. B. Wharton, Jr., El Dorado, Clyde D. Rodgers, Little Rock, John Connell, New Orleans, Earle H. Hunt, Clarksville, and Berry L. Moore, in closing.

"Endoscopy," Paul L. Mahoney, Little Rock, discussed by John Agar, Harvey Shipp and D. A. Rhinehart, Little Rock.

* * *

On Tuesday evening, April 16th, the Sebastian County Medical Society was host at a buffet supper and dance honoring guests and members at the Goldman Hotel.

SECTION OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

Tuesday, April 16th, 1940

The meeting was called to order by the Chairman, Virgil Payne, Pine Bluff.

The following scientific program was presented:

"Management of Mastoid Complications," John J. Shea, Memphis.

"Fundus Examination as an Aid in Diagnosis and Prognosis of General Disease," J. M. Stanford, Memphis.

"Some Points of Technique in Surgery of the Eye," Meyer Wiener, Saint Louis.

A round table luncheon was held at noon.

Officers elected are: Chairman, L. Gardner, Russellville; Vice-Chairman, R. R. Kirkpatrick, Texarkana; Secretary-Treasurer, Raymond C. Cook, Little Rock, and Censor, K. W. Cosgrove, Little Rock.

SCIENTIFIC SESSION

APRIL 17TH, 1940, 8:30 A. M.

The Society was called to order by Berry L. Moore, Vice-president.

The scientific program proceeded in order.

"Premature Detachment of the Normally Situated Placenta," Ralph M. Sloan, Jonesboro, discussed by Clyde D. Rogers, Little Rock, and Ralph M. Sloan in closing.

"The Advantages of Serum Transfusions over Other Intravenous Vehicles," John H. Connell, New Orleans.

"A Study of Open Intrapleural Pneumolysis," Harvey Shipp, Little Rock, discussed by J. D. Riley, State Sanatorium.

"Prevention of Abdominal Adhesions," J. K. Donaldson, Little Rock, discussed by D. E. White, El Dorado, E. E. Barlow, Dermott, and J. K. Donaldson, in closing.

"The Indications for and the Relative Efficiency of Various Suture Materials," Joe B. Wharton, Jr., El Dorado, discussed by D. E. White, El Dorado, A. F. Hoge, Fort Smith, T. P. Foltz, Fort Smith, Tom Douglass, Chicago, John H. Connell, New Orleans, and J. B. Wharton, Jr., in closing.

"Medical Education in the United States 1934-1939," S. P. Cromer, Little Rock, discussed by Frank Vinsonhaler, Little Rock.

FINAL SESSION

HOUSE OF DELEGATES

APRIL 17TH, 1940, 1:30 P. M.

The meeting was called to order by President Buchanan.

The following delegates and county society members seated as delegates in the absence of regularly elected delegates by action of the House of Delegates were present:

ASHLEY—M. C. Crandall; BENTON—M. W. Chastain; BOONE—H. V. Kirby; BRADLEY—W. J. Hunt; CARROLL—D. K. McCurry; CRAIGHEAD-POINSETT—Joe Verser, Ralph M. Sloan; CRAWFORD—J. M. Stewart; DESHA—J. H. Hellums; DREW—J. P. Price; FRANKLIN—W. C. Porter; GARLAND—H. King Wade, Geo. B. Fletcher, W. T. Wootton; GRANT—Miles F. Kelly; INDEPENDENCE—L. T. Evans; JEFFERSON—J. M. Lemons; JOHNSON—Earle H. Hunt; MILLER—H. E. Murry; NEVADA—A. S. Buchanan; OUACHITA—R. C. Kennerly; POPEYELL—B. R. Teeter; PULASKI—H. A. Higgins, M. J. Kilbury, Paul L. Mahoney, S. C. Fulmer; ST. FRANCIS—C. V. Powell; SALINE—J. E. Little; SEBASTIAN—E. C. Moulton, A. F. Hoge; SEVIER—C. C. Hanchey; UNION—B. L. Moore, Joe B. Wharton, Jr.; WASHINGTON—J. F. Lewis, and WHITE—S. J. Albright.

Other members of the House of Delegates present were:

A. S. Buchanan (seated as delegate from Nevada County by action of the House of Delegates); Councilors F. D. Smith, M. C. Hawkins, Jr., J. O. Rush, S. W. Douglas, R. B. Robins, Euclid M. Smith, J. F. John and Clyde McNeil; Past-presidents George B. Fletcher (seated as delegate from Garland County), L. J. Kosminsky, J. M. Lemons, W. H. Mock, S. J. Wolfermann and W. T. Wootton (seated as delegate from Garland County); and Secretary Brooksher.

S. J. Wolfermann presented the report of the Nominating Committee:

President-Elect—S. J. Albright, H. Fay H. Jones, W. G. Hodges.

First Vice-president—I. Fulton Jones.

Second Vice-president—H. V. Kirby.

Third Vice-president—C. W. Dixon.

Treasurer—R. J. Calcote.

Secretary—W. R. Brooksher.

Councilor, Second District—L. T. Evans.

Councilor, Fourth District—S. W. Douglass.

Councilor, Sixth District—H. E. Murry.

Councilor, Eighth District—F. A. Corn, Jr.

Councilor, Tenth District—Clyde McNeil.

Delegate to the American Medical Association—E. E. Barlow.

By motion, A. S. Buchanan was selected as Alternate Delegate to the American Medical Association, amending the report of the Nominating Committee.

By motion the report of the committee was accepted.

President Buchanan appointed C. C. Hanchey, A. B. Dickey and Paul L. Mahoney, tellers, and

the House of Delegates voted by ballot upon the names of S. J. Allbright, H. Fay H. Jones, W. G. Hodges for President-Elect. H. Fay H. Jones received a majority of votes on the first ballot and was declared elected by President Buchanan. By motion (Allbright-Hunt) the election of H. Fay H. Jones was made unanimous.

By motion (Wolfermann-Hunt) the Secretary cast the unanimous ballot of the House of Delegates for all other offices except that of Secretary. President Buchanan cast the unanimous vote of the House of Delegates for the office of Secretary.

Fred H. Krock read the report of the Reference Committee.

REPORT OF REFERENCE COMMITTEE

Mr. Chairman and Members of the House of Delegates of the Arkansas Medical Society, the Reference Committee wishes to make the following report:

President's Address—

President Buchanan made the following recommendations:

1. Delegates to the annual meeting of the Arkansas Medical Society be elected for a term of two years. We approve of this recommendation.

2. That the chairman of the scientific work committee should not be the secretary of the society. Inasmuch as there is an amendment to the constitution and by-laws of the Society covering this recommendation to be voted upon at this session, it is our feeling that this is a matter for the individual judgment of the delegates, and not of this committee.

On this occasion we wish to express to the scientific committee and its chairman, Doctor R. B. Robins, our appreciation for the excellent programs for the past six years.

3. That a distinguished service medal be awarded annually by the Society to any member who distinguishes himself in the field of science, legislation, public relations or in any manner which redounds to the benefit of organized medicine. We endorse this recommendation.

4. The president recommends that the Arkansas Medical Society concur in the platform of the American Medical Association as outlined in the Journal in the issue of March 23, 1940, page 1081. The committee is in accord with this recommendation.

Committee on Scientific Work—

We wish to commend this committee on the excellent program which they presented to our Society this year. It is certain that each of us will have carried away something valuable from this meeting for use in our practice.

Legislative Committee—

We congratulate the legislative committee for securing necessary legislation to enable Arkansas to retain a first-class medical school by securing the necessary appropriations.

The committee is to be commended for preventing an influx of foreigners into the medical practice in Arkansas by securing the enactment of a law against issuing licenses to anybody who is not an American citizen.

The reference committee endorses the recommendation of Doctor Shuffield and his committee that we

acquaint our legislators with the impending attack upon the Basic Science Law by organized foes.

We are in accord with the recommendation of this committee that suitable legislation be passed to make it mandatory that all coroners throughout the state be graduates of medicine in good standing with the Arkansas Medical Society. (Note: This recommendation not approved by the House of Delegates.)

Committee on Health and Public Instruction—

The report of this committee is detailed and worth thoughtful study. Attention is called to the program on syphilis control, and the recommendation is made that some work be done on mental hygiene throughout the state. The reference committee is heartily in accord with this recommendation.

Committee on Medical Education and Hospitals—

The reference committee approves the report of this committee and wish to commend them for the refresher courses and opportunities for postgraduate study which have been offered in the state for our physicians.

Committee on Public Relations—

The committee on public relations is to be congratulated on the large amount of publicity which they have been able to obtain throughout the state.

Committee on Medical Economics—

The following recommendations were made:

1. That the expansion of public health, maternal, and child health services and expenditures for the expansion of this service should not be for the treatment of diseases except where it could not be accomplished through the private practitioner. Approved by our committee.

2. That hospital facilities be expanded only where need exists. The hospital situation would indicate that there is at present greater need for the use of existing hospital facilities than for additional hospitals.

3. That the care of the indigent is a responsibility of the state and national government and not just the medical profession, and that such care should be organized by government units and supported by state and federal funds. The committee feels that too much governmental control is implied by the recommendations as stated.

4. That the principle of hospital service insurance which is being widely adapted throughout the country, as in Pulaski County is a step forward but that such insurance be a community project. The program that would work well in a city of 50 or 100 thousand might not be practical for a city of \$5,000.

The group hospitalization plans should be confined to hospital facilities and not include any type of medical care. Insurance plans should have the approval of the county and state societies before they are given consideration. Approved by our committee.

Cancer Control Committee—

The committee recommends that the resignation of Doctor F. A. Hughes be accepted and that another appointment be made to take his place because of transfer to Tennessee. We also recommend that a vote of thanks be offered to the Auxiliary for their co-operation in sponsoring the Women's Field Army.

State Heart Committee—

This committee recommends a more uniform classification of heart diseases in our records. We endorse this recommendation.

Maternal and Child Welfare Committee—

We approve of this committee's recommendations that a full-time instructor in obstetrics be hired, whose salary

will be paid entirely by the State Department of Health. A schedule of work will necessarily have to be worked out with the instructor by this committee and by the State Department of Health. This proposal has already been approved by the council.

Committee on Postgraduate Instruction—

We wish to commend the work of the postgraduate instruction committee for the work done this past year and hope their work will be continued.

Committee on Syphilis Control—

We wish to commend the committee on the statistical study on the treatment of syphilis which they have made in 1939 and hope the start which this committee has made will be continued.

Committee on Liason with Arkansas Tuberculosis Association—

We want to commend the liason committee for the work they are doing and heartily endorse the creating of a library for the two tuberculosis sanatoriums. We recommend this as a project to be considered by the Women's Auxiliary.

Midwifery Committee—

This committee makes the following recommendations:

1. That the Arkansas State Board of Health continue to issue permits to practice midwifery, but only to those whose applications are signed by either County Health Doctor or County Nurse. The committee approves of this recommendation. (Note: Approval of application by county nurse deleted by House of Delegates.)
2. The committee recommends the establishment of prenatal clinics for indigents to be conducted by the county health doctor or by some one of the local society. We approve of this recommendation.
3. The committee recommends the furnishing of maternity bags to midwives by local American Red Cross chapters. We approve of this recommendation.
4. The committee recommends that "A Manual for Teaching Midwives" by the Children's Bureau of the U. S. Department of Labor, be used as uniform text. Approved by our committee.
5. That the councilor from each district or some one designated by him contact county societies in his district to encourage them to adopt and sponsor this program. Our committee is in accord with this recommendation.
6. That in those counties without active medical societies the County Health Unit be instructed to inaugurate this work. Approved by our committee.

Report of the Secretary of the State Medical Board of the Arkansas Medical Society—

We endorse the recommendation of this committee that an annual registration fee of \$1.00 be charged every physician in the state, but feel that this should be paid into the treasury of the Arkansas Medical Society, and that this money be used for the publication of necessary pamphlets and information that must be furnished the state or other states regarding reciprocity, as well as for the work necessary to keep the files of the State Medical Board up-to-date concerning every practicing physician in Arkansas.

Report of the Secretary—

We approve in its entirety the report of the Secretary and compliment him on his very efficient work during the past year.

Report of the Treasurer—

The report of the Treasurer is satisfactory and we are glad to see a substantial deposit to the credit of

the Society. We hope that this surplus may be increased for use in any emergency that may arise.

Report of the Women's Auxiliary—

We express our appreciation for the excellent work and co-operation which has been given us by the Auxiliary of the Arkansas State Medical Society.

Report of Honorable Peter A. Deisch—

The report of Honorable Peter A. Deisch, attorney for the Society, summarizes legislation that occurred during the past year and should be carefully studied by every member of the Society.

Committee on Scientific Exhibits—

We wish to commend the committee on scientific exhibits for the splendid exhibits arranged for our study.

The reference committee wishes to commend Doctor Vinsonhale for assembling material on the "History of Medicine and Practice," and it is our sincere desire that this history will be completed for publication.

The reference committee wishes to thank Doctor Barlow, our delegate to A. M. A., for his informative report. It is our feeling that the State Society should reimburse the delegate to A. M. A. convention for his expenses incident to attending the session inasmuch as such appointment entails a great deal of personal sacrifice without an opportunity for attending any of the scientific sessions or exhibits. This work is done for our Society, and the expenses attached thereto should be the responsibility of our Society.

We, the committee, in behalf of the entire membership of the Arkansas Medical Society, take this occasion to thank our genial hosts, the Sebastian County Medical Society, and the citizens of Fort Smith for the splendid entertainment afforded us during this our annual meeting.

Upon motion (Krock-Hunt) for adoption of the report of the Reference Committee came to discussion. By substitute motion (Wolfermann-Hunt) the report was amended to delete the recommendation as to coroners. By substitute motion (Kosminsky-McNeil) the report was amended to delete the recommendation for county nurses to issue certificates to midwives.

By motion (Wolfermann-Fulmer) the report of the Reference Committee was adopted as amended.

Euclid M. Smith read the report of the Council.

REPORT OF THE COUNCIL

EUCLID SMITH, Secretary

April 15th. Allowed honorarium of secretary-editor. Allowed honorarium of counsel. Ordered all expenses of 65th annual session paid. Appointed Clyde McNeil and J. F. John to audit books of the secretary and treasurer and of the committee on postgraduate study.

April 16th. Approved plan of committee on appendicitis of the Southern Medical Association and requests that each councilor act as chairman within his district, the central committee to act as a coordinating body. Received report and tendered vote of thanks to Hoyt R. Allen, council representative in charge of commercial exhibits. Approved payment of expenses of delegates to the sessions of the American Medical Association. Nominated honorary members to the House of Delegates. Approved appointment of a committee on industrial

health. Adopted resolution on retirement of Dr. Wm. H. Woodward.

April 17th. Received report of auditing committee. Discussed FSA plan of medical care.

By motion (E. Smith-McNeil) the report was adopted.

By motion (Wootton-Wharton) the courtesy of the floor was extended Mrs. S. J. Wolfermann, who addressed the House of Delegates as Commander for Arkansas of the Women's Field Army and requested that the House of Delegates recommend that each county medical society appoint a committee on cancer control. By motion (Wootton-Moore) this recommendation was indorsed.

By motion (Moore-Hunt) the proposed amendment to the constitution (Chapter VIII, Section 2: To amend the first sentence which reads: "The Committee on Scientific Work shall consist of three members of which the Secretary shall be one," by deleting the word "one" and substituting therefor, the word "Chairman.") was rejected.

The Secretary then presented the names of the following members nominated for honorary membership in the Society by the Council:

J. C. Blackwood, Western Grove.

C. K. Carruthers, Pine Bluff.

Chas. F. Cole, Prattsville.

W. A. Kreisel, Little Rock.

J. J. Morrow, Cotter.

M. L. Norwood, Lockesburg.

G. Max Watkins, Walnut Ridge.

By motion (Kosminsky-Hunt) these were elected to honorary membership.

By motion (Hawkins-McNeil) the House of Delegates arose in standing vote of appreciation for the services of President Buchanan.

E. C. Moulton expressed the appreciation of his father H. Moulton, and of the family, for the flowers and tribute from the Society.

H. T. Smith presented the matter of need for a minimum fee schedule, elastic to each county society and of need that no action of the state board of health affecting the practice of medicine be adopted without its reference to the Council of the Society. By motion (Chastain-McNeil) these matters were referred to the Council.

Earle H. Hunt presented the matter of contributions to the National Physician's Committee for the Extension of Medical Services. By motion (Kosminsky-Murry) it was directed that a com-

mittee of three, not officers of the Society, be appointed to write letters to all members asking their support of this activity.

By motion (Hunt-McNeil) the final session of the House of Delegates adjourned.

FINAL GENERAL SESSION

APRIL 17TH, 1940

The meeting was called to order by President Buchanan.

The following Past-Presidents came to the rostrum and were introduced: George B. Fletcher, L. J. Kosminsky, J. M. Lemons, W. H. Mock, M. L. Norwood, S. J. Wolfermann and W. T. Wootton.

H. T. Smith, President-Elect, was escorted to the platform by R. B. Robins and S. W. Douglas. President Buchanan then expressed his appreciation for the opportunity to serve the Society and for the cooperation which he had received from the members, presenting the gavel to H. T. Smith, who expressed his appreciation for the honor of serving the Society and promised his best efforts in the interests of organized medicine.

A. S. Buchanan and S. J. Wolfermann then escorted H. Fay H. Jones, President-Elect, to the rostrum. President-Elect Jones thanked the Society for the honor which had been conferred upon him.

By motion (Hunt-Fulmer) the Society adopted a special vote of thanks to the newspapers of Fort Smith for publicity given the annual session.

Whereas, the Southwest American and Times Record have published excellent and informative articles during the annual session of the Arkansas Medical Society in Fort Smith, April 15th-17th, and

Whereas, the Society was greeted by a most cordial press welcome, which gave a full account of the proceedings to follow, and

Whereas, the daily comments were most informative and generous,

Therefore, Be it Resolved, that the thanks and appreciation of the Society are hereby extended to the Southwest American and Times Record.

By motion (Hunt-Murry) the Society expressed its thanks to the Sebastian County Medical Society, the Goldman Hotel, the distinguished guests and the citizens of Fort Smith for the cordial welcome and hospitality which made the 1940 session an outstanding one.

The Secretary then called attention to the fact that a current solicitation for a so-called "history of Arkansas physicians" did not bear

the approval of the Society; that participation in such ventures was unethical, and requested all members to ignore these solicitations.

R. B. Robins announced that a "plowing contest" was scheduled for the 1940 session between Clyde McNeil and George B. Fletcher.

H. A. Higgins presented the invitation of Little Rock for the 1940 session of the Society. By motion (Chastian-Kosminsky) the invitation was accepted.

The Society then adjourned sine die.

REGISTRATION AT THE FORT SMITH SESSION

ARKANSAS—E. B. Swindler; ASHLEY—L. C. Barnes, M. C. Crandall, J. T. Herron; BENTON—M. W. Chastain, L. O. Greene, A. J. Harrison, H. J. G. Koobs, Clyde McNeil, W. A. Moore, A. L. Peacock; BOONE—J. H. Fowler, J. G. Gladden, J. L. Jackson, Ulys Jackson, Ben Kirby, H. V. Kirby, O. B. McCoy, D. L. Owens; BRADLEY—W. J. Hunt; CARROLL—J. F. John, D. K. McCurry; CHICOT—E. Baker, E. E. Barlow, J. H. Burge, S. W. Douglas, C. G. Leverett; CLARK—J. P. Bremer, T. T. Ross, C. K. Townsend; CLAY—F. H. Jones; CLEVELAND—A. B. Robertson; COLUMBIA—W. P. Cooksey; CONWAY—H. E. Mobley, W. P. Scarlett; CRAIGHEAD-POINSETT—R. M. Sloan, E. J. Stroud, Joe Verser; CRAWFORD—F. A. Boomer, C. J. Campbell, J. R. Crigler, F. G. Engler, Q. R. Galloway, S. D. Kirkland, O. J. Kirksey, A. A. McKelvey, J. L. Post, H. W. Savery, J. M. Stewart; CRITTENDEN—L. C. McVay; DESHA—J. H. Hellums, H. T. Smith; DREW—J. P. Price; FAULKNER—L. L. Hassell; FRANKLIN—W. H. Bollinger, A. S. J. Clarke, Thos. Douglass, W. C. Porter; GARLAND—F. M. Burton, B. F. Cassada, G. B. Fletcher, D. C. Lee, C. S. Moss, J. M. Proctor, Euclid Smith, J. S. Stell, D. B. Stough, H. King Wade, W. T. Wootton; GRANT—Miles F. Kelly; GREENE—R. J. Haley, Jr.; HEMPSTEAD—J. W. Branch, J. E. Gentry, Don Smith; HOT SPRINGS—W. G. Hodges; INDEPENDENCE—C. A. Churchill, L. T. Evans, E. M. Gray, I. M. Huskey; JACKSON—A. L. Best, A. M. Elton; JEFFERSON—H. T. Capel, Fred Hames, J. M. Lemons, Virgil L. Payne, W. A. Snodgrass, Jr.; JOHNSON—Geo. L. Hardgrave, Earle H. Hunt, J. M. Kolb, G. R. Siegel; LAWRENCE—E. J. Cruse, J. C. Hughes, J. F. Jackson; LINCOLN—L. T. Taylor; LITTLE RIVER—E. R. King, P. H. Phillips, J. W. Ringgold; LONOKE—E. A. Callahan, F. A. Corn; MADISON—C. B. Beeby, J. F. Walker; MILLER—J. W. Burnett, Wm. Hibbitts, R. R. Kirkpatrick, L. J. Kosminsky, H. E. Murry, W. Decker Smith; MONTGOMERY—J. D. Robbins; NEVADA—A. S. Buchanan, J. B. Hesterly, O. G. Hirst; OUACHITA—R. C. Kennerly, J. B. Jameson, R. B. Robins, J. S. Thompson, S. A. Thompson; PHILLIPS—Hugh Mobley; POLK—B. H. Hawkins, Pierre Redman; POPE-YELL—W. E. Ballenger, J. F. Hays, Robert Hood, L. Gardner, H. L. Montgomery, J. M. Stanford, J. M. Sexton, B. R. Teeter; PRAIRIE—J. C. Gilliam, T. G. Porter; PULASKI—J. L. Aday, J. S. Agar, Hoyt R. Allen, L. F. Barrier, T. Duel Brown, H. H. Buckelew, R. J. Calcote, F. Walter Caruthers, Alan G. Cazort, Raymond Cook, K. W. Cosgrove, J. K. Donaldson, L. L. Fatherree, S. C. Fulmer, Dewell Gann, Jr., W. B. Grayson, J. Donald Hays, H. A. Higgins,

H. G. Hollenberg, H. W. Hundling, H. Fay H. Jones, M. J. Kilbury, M. E. McCaskill, Paul L. Mahoney, Pat Murphey, W. R. Parsons, Sam Phillips, G. R. Reagan, D. A. Rhinehart, C. D. Rodgers, C. A. Rosenbaum, R. E. Rowland, W. L. Sadler, John M. Samuel, Joe H. Sanderlin, S. M. Sanford, A. C. Shipp, Harvey Shipp, J. H. Shuffield, Randolph Smith, W. Myers Smith, W. A. Snodgrass, H. V. Stewart, J. A. Summers, Geo. Thompson, Frank Vinsonhaler, Chas. Wallis, A. M. Washburn; SALINE—J. E. Little; ST. FRANCIS—C. V. Powell, J. O. Rush; SCOTT—C. Beville; SEARCY—S. G. Daniel; SEBASTIAN—W. F. Adams, J. W. Amis, W. O. Arnold, H. M. Barker, C. E. Benefield, J. H. Benefield, C. B. Billingsley, A. A. Blair, W. R. Brooksher, C. T. Chamberlain, J. S. Coffman, Ralph E. Crigler, A. B. Dickey, E. K. Disney, H. C. Dorsey, W. G. Eberle, M. E. Foster, B. W. Freer, T. P. Foltz, D. W. Goldstein, C. W. Hall, L. M. Henry, Louise Henry, A. F. Hoge, Chas. S. Holt, O. R. Honomichl, Hugh Johnson, J. E. Johnson, E. B. Jones, I. Fulton Jones, J. L. Kellum, C. H. Kennedy, Fred H. Krock, S. P. McConnell, C. S. Means, E. C. Moulton, H. Moulton, R. R. Nowlin, W. C. Riggins, J. D. Riley, W. F. Rose, M. H. Scott, Raymond T. Smith, J. S. Southard, J. E. Stevenson, S. P. Stubbs, B. L. Ware, Ralph E. Weddington, S. J. Wolferman, G. G. Woods, W. M. Woods; SEVIER—C. A. Archer, R. C. Dickinson, C. C. Hanchey, B. E. Hendrix, G. L. Kimball, C. E. Kitchens, M. L. Norwood; WASHINGTON—Jeff Baggett, C. B. Callen, E. F. Ellis, Allan A. Gilbert, Alfred H. Hathcock, Preston L. Hathcock, P. L. Hathcock, H. H. Howze, R. H. Huntington, Ruth Ellis Lesh, Vincent O. Lesh, James F. Lewis, W. H. Mock, Fount Richardson, F. Sisco, C. P. Sisco; WHITE—S. J. Allbright, T. L. Adair, M. C. Hawkins, Jr.; WOODRUFF—A. B. Tate; UNION—H. J. Mayfield, B. L. Moore, M. V. Russell, J. Murry Smith, J. B. Wharton, Jr., D. E. White.

Members	265
Visitors	80
Exhibitors	35
Total Registration	380

The following scientific exhibits were presented at the 65th annual session of the Society in Fort Smith:

Arkansas Eugenics Association; American Heart Association (sponsored by state Heart Committee); American Society for the Control of Cancer (sponsored by state Committee on Cancer Control); Plastic Surgery, Dr. W. Milton Adams, Memphis; Corneal Transplants, Dr. W. McKinney, Memphis; Electrocardiography, Dr. A. A. Blair; University of Arkansas School of Medicine group exhibit; Moulages, Dr. Fred Hames, Pine Bluff; X-ray study of Flowers, Miss Edna Yoes, Fort Smith; Attendance at Postgraduate Study Courses, Committee on Postgraduate Study.

The following firms exhibited at the Session:

A. S. Aloe Company, Saint Louis; Dick X-ray Company, Little Rock; General Electric X-ray Corporation, Oklahoma City; R. T. Hickerson, Little Rock; Holland-Rantos, New York; Kay Surgical, Inc., Memphis; Lederle Laboratories, Inc., New York; J. A. Majors, New Orleans; Mead Johnson and Company, Evansville, Indiana; Peacock Surgical Company, Inc., Memphis; Petrolagar Laboratories, Chicago; Phillip Morris Co., Ltd., New York; E. R. Squibb and Sons, New York; State Surgical supply, Inc., Little Rock; W. C. Scott and Co., Kansas City, and John Wyeth and Brother, Philadelphia.

RANDOM THOUGHTS OF THE SECRETARY

April 25th. Taking the day off we visit Kansas City where we greet old friends and look the city over at length, impressed with the change of scene an active and aggressive Jackson County Medical Society has brought forth. Among other innovations is the monthly health forum at the auditorium, a regularly-scheduled public meeting, which we are sure is productive of good to the medical profession. As we usually do, we run into another convention, fugitive from the last one as we are, but we do not feel that the waterworks boys (not an urological meeting) are having as much fun as did some 300 medical men about ten days ago.

April 30th. The balmy days of our latest summer give way today to the dust storm, shortly followed by a brief pelting by hail, causing many to utter bromides as to the length of summer. The dust seems to come in greater force and at more frequent intervals with the passage of the months and we wonder if ultimately we shall share the fate of Garden City, Kansas, where we have seen a "man-size" duster in full swing, and no more discouraging sight is there in a disturbed nature.

May 1st. This day Foltz undergoes a minor operation attended with all the appurtenances consistent with the high cost of medical care, the iron lung alone excluded, obviously, not needed in this instance. In the evening the I. Fulton Jones' and Amis by to dine with much talk of this and that, but mostly of the 65th annual session.

May 2nd. For far and near they gather for the Johnson County banquet where Siegel takes his accustomed duty and Jimmie Kolb introduces each one at the table without faltering. Neither the voluble Earle Hunt or the breezy Duel Brown in form tonight and it requires much prying to bring forth a few tales. The Cabin Creek boy, Cazort, home from the big city, professes to want to quit the monotony of the whole thing, possibly to again pile up rocks for a fence. We come in for our usual share of banter, Carruthers joining the anvil chorus this time, but we are mostly impressed with the fact that both Fay Jones and Duel Brown are able to get away on the same night. The spa city represented by George Fletcher and Euclid Smith, the first time we recall seeing them at this function and glad they came. Councilor McNeil pays an official visit on this occasion and the other northwest Arkansas representative, Fount Richardson, rides up, a chauffeur at the wheel, which means to us only that the Fayetteville boy intends to sleep the long road back home.

May 3rd. Looking over the Johnson County Graphic today and if Friend Giacomini thinks that group picture of doctors at the Clarksville banquet will increase his circulation, he is not the newspaper man we think he is. But thanks to him for generous publicity to the event, a trait we have found this editor to have in abundance for Clarksville and all that is Clarksville's.

May 6th. This night sitting on the stage for nurse graduation where Everett Foster's side remarks bring levity to the solemn assembly, a levity which the audience cannot share. Thence to Sparks' staff where there is abundance of that grand old institution, the dutch lunch, and Chas. Holt bundles up two thick sandwiches for us to carry home to the little woman, who is most appreciative of this substantial contribution to her happiness.

May 11th. Belatedly we learn of the reserve officers' banquet over which Buckalew presided, garbed in a tarpaulin, or what appeared to be one, conducting a quiz to which few correct answers were received, but at which the toastmaster's stories were "tops" and all departed in a happy mood.

May 12th. The simultaneous occurrence of Mother's Day and Hospital Day calls for much activity with church in the morning and again in the evening; at the latter, the Sparks' nurses graduating in a beautiful ceremony, and the minister brings new thoughts on the influence of Christian religion on civilization and the healing arts. Even today, across the seas there is the imminence of a return to bestiality, and the hordes of warriors murder the innocent with new, frightful weapons. God grant that somehow reason and the love of humanity and peace may be allowed to exert their force to stop a carnage, the sorrows of which will carry on to generations now unborn.

May 14th. With much appreciation we thank George Fletcher and Stanley Gates for support to Journal advertisers. The Journal could use 998 more physicians, interested in the economics of The Journal, and enthusiastic in the varied activities of the Society. If we ever get them, this column will burst forth into poetry!

May 16th. This day to the Third Councilor District meeting at Brinkley, tiring of our driving, we let the Rock Island carry us comfortably from Little Rock, stepping out on the hotel platform at Brinkley, immediately participating in a war discussion wherein Grayson spreads the eagle. Following, as is the invariable rule, we listen to difficulties with the FSA. Thence to a good dinner with the Hot Springs minister in dramatic and interesting role as Nicodemus in person. Away in the company of Joe Shuffield, Jack Agar, and the president-elect, with no lull in conversation over the miles to Little Rock, but with solitude, trucks and one herd of cows as an accompaniment homeward.

May 20th. Observing a most unusual spectacle at the Lions convention today as Sam Thompson does all the politicking while Bob Robins sits on the sidelines. The Camden club comes with all reinforcements of pottery, talent, gab and color and takes the entertainment sector in a joyful blitzkrieg. Siegel dramatizes a presentation speech and even hardened tail-twisters touch their eyes with handkerchiefs. Thompson learns much of how to get away from a town late in the evening and will better appreciate some of our difficulties in the future. And so to a late hour with fun and merriment and we would like to again sit in with the Lions at Little Rock next year.

May 21st. The Auxiliary again demonstrates how lucky we Sebastian County physicians are by giving us another happy entertainment, to the greater success of which even the rain defers. Food in quantity, no speeches, not many telephone calls, much gay conversation, and only the rabid baseball fans are able to get away before nine-thirty. Now, to wait until 1941!

Think not so much of what thou hast not, as of what thou hast; but of the things which thou hast, select the best, and then reflect how eagerly they would have been sought if thou hadst them not.—Marcus Aurelius.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

The 16th annual convention of the Woman's Auxiliary to the Arkansas Medical Society opened its general session at the Goldman Hotel in Fort Smith, Monday, April 15th, with representatives from all over the state attending.

The Executive Board meeting was held at eleven a.m. in the hotel parlors, with Mrs. C. E. Kitchens, president, presiding.

The luncheon at twelve o'clock was given for the County Presidents and the State Officers. Mrs. Rollo K. Packard of Chicago, Ill., president of The Woman's Auxiliary to the American Medical Association, was guest of honor. Mrs. M. E. Foster, local chairman, was in charge of the luncheon.

The general session met at two o'clock in the hotel parlors, where Mrs. I. Fulton Jones, president of the Woman's Auxiliary to the Sebastian County Medical Society, greeted the visitors. Invocation was given by Rev. Carleton Lathrop of the St. John's Episcopal Church.

The address of welcome was given by Mrs. E. C. Moulton, Fort Smith. The response to the address of welcome was made by Mrs. A. S. Buchanan of Prescott. After this reports of the state officers and state chairmen were heard. A report of the meeting of the Woman's Auxiliary to the American Medical Association was given by Mrs. Loyce Hathcock of Fayetteville. Mrs. W. Turner Wootton of Hot Springs gave the report on the meeting of the Woman's Auxiliary to the Southern Medical Association.

At 4:30 p.m., a beautiful tea at the home of Dr. and Mrs. D. W. Goldstein was given in honor of the convention visitors. Mrs. A. A. Blair, Mrs. Goldstein, and Mrs. W. R. Brooksher, general convention chairmen, received the guests at the door. In the receiving group were Mrs. R. K. Packard, Chicago, national president; Mrs. C. E. Kitchens, state president; Mrs. I. Fulton Jones, president of the Ft. Smith Auxiliary; Mrs. A. S. Buchanan, Prescott; Mrs. H. T. Smith, McGehee; Mrs. Alfred Hathcock, Fayetteville; Mrs. Loyce Hathcock, Fayetteville; Mrs. Charles Lutterloh, Hot Springs; Mrs. E. D. McKnight, Brinkley; Mrs. Calvin Churchill, Batesville; Mrs. Pierre Redman, Mena; Mrs. S. C. Fulmer, Little Rock; Mrs. C. W. Garrison, Little Rock; Mrs. H. Wade King, Hot Springs; Mrs. W. T. Wootton, Hot Springs; Mrs. William Hibbitts, Texarkana; Mrs. C. W. Jones, Benton; Mrs. J. B. Crawford, Little Rock.

Seated in the dining room at the tea table were Mrs. W. R. Brooksher, Sr., Mrs. J. D. Southard, Mrs. St. Cloud Cooper, and Mrs. J. A. Folz.

Mrs. Fred Krock and Mrs. H. H. Smith received the guests in the dining room. Young girls who served were Eva Foster, daughter of Dr. and Mrs. M. E. Foster; Betsy Johnson, daughter of Dr. and Mrs. Jim Johnson; Virginia Johnson and Edna Jean Johnson, daughters of Dr. and Mrs. Hugh Johnson; Judy Moulton, daughter of Dr. and Mrs. E. C. Moulton, and her guest, Nancy Keegan, Omaha, Neb.

Mary Frances Sewell and Louise Sewell played a program of piano and violin numbers during the tea hour.

The General Session met at 9:30 a.m., April 16th, in the hotel parlors.

Invocation was given by Rev. Victor Coffman, Immanuel Baptist church.

An address was given by Dr. A. S. Buchanan, president of the medical society.



MRS. ALFRED H. HATHCOCK
Fayetteville

President, Women's Auxiliary to the
Arkansas Medical Society
1940-1941

Reports were heard from county auxiliaries.

Mrs. W. Turner Wootton read the greetings from the Woman's Auxiliary to the Southern Medical Association by Mrs. Charles P. Corn of Greenville, South Carolina, president of that organization.

The following officers for 1940-41 were elected: President, Mrs. Alfred Hathcock, Fayetteville; president-elect,

Mrs. Calvin A. Churchill, Batesville; secretary, Mrs. Fount Richardson, Fayetteville; treasurer, Mrs. B. A. Bennett, Little Rock; first vice-president, Mrs. E. D. McKnight, Brinkley; second vice-president, Mrs. L. C. Fincher, El Dorado; third vice-president, Mrs. Ralph Cross, Texarkana; fourth vice-president, Mrs. Vigil Payne, Pine Bluff; parliamentarian, Mrs. Pierre Redman, Mena; historian, Mrs. C. W. Garrison, Little Rock; publicity secretary, Mrs. H. E. Murry, Texarkana.

The Hardscrabble Country Club was the scene for a luncheon and program at one o'clock noon. Mrs. I. Fulton Jones was toastmistress. Mrs. S. P. McConnell of Booneville gave the invocation. The past presidents, state officers and wives of medical society officers were introduced. Mrs. C. E. Kitchens, president, gave a report of her year's work. The honor guest, Mrs. Rollo K. Packard, gave an address on "Functions of the Auxiliary." The new officers were formally installed by the national president, Mrs. Packard. The gavel was presented by Mrs. C. E. Kitchens to Mrs. Alfred Hathcock, incoming president.

Immediately following the closing business session, Mrs. Hathcock called a meeting of the new board members. The following committees were appointed:

Advisory board councilors: Mrs. Marcus T. Smith, Conway; Mrs. J. T. McLain, Gurdon; Mrs. C. W. Jones, Benton; Mrs. J. B. Crawford, Little Rock; Mrs. C. E. Kitchens, DeQueen.

Councilwoman to the Woman's Auxiliary to the Southern Medical Association, Mrs. W. Turner Wootton, Hot Springs.

Organization: Mrs. E. D. McKnight, chairman; district 1, Mrs. H. S. Watson, Earle; district 2, Mrs. O. J. T. Johnston, Batesville; district 3, Mrs. S. A. Drennen, Stuttgart; district 4, Mrs. J. H. Burge, Lake Village; district 5, Mrs. Warren Riley, El Dorado; district 6, Mrs. R. C. Dickinson, Horatio; district 7, Mrs. D. B. Stough, Hot Springs; district 8, Mrs. L. F. Barrier, Little Rock; district 9, Mrs. Henry Kirby, Harrison; district 10, Mrs. A. S. J. Clark, Ozark.

Education and Public Health: Mrs. L. C. Fincher, El Dorado; Mrs. S. A. Thompson, Camden; Mrs. J. K. Donaldson, Little Rock; Mrs. L. T. Evans, Batesville.

Hygeia: Mrs. Ralph Cross, Texarkana, chairman; Mrs. R. T. Henry, Springdale; Mrs. J. B. Crawford, Little Rock; Mrs. W. F. Rose, Fort Smith; Mrs. R. H. Whitehead, DeWitt.

Public Relations: Mrs. Virgil Payne, Pine Bluff, chairman; Mrs. R. B. Robins, Camden; Mrs. R. E. Weddington, Fort Smith; Mrs. H. King Wade, Hot Springs; Mrs. W. A. Snodgrass, Little Rock.

Ilse F. Oates Student Loan Fund: Mrs. C. E. Oates, North Little Rock, chairman; Mrs. J. T. Blalock, Crawfordsville; Mrs. Charles G. Hinkle, Batesville; Mrs. Charles A. Lumsden, DeWitt; Mrs. R. R. Robins, Texarkana; Mrs. Allyn Powers, Hot Springs; Mrs. G. J. Gladden, Harrison; Mrs. H. H. Howze, Fayetteville; Mrs. B. J. Reaves, Little Rock.

Physical Health Examination: Mrs. A. A. Blair, Fort Smith; Mrs. Fred Morrow, Fayetteville; Mrs. E. V. Dildy, Nashville; Mrs. O. G. Hirst, Prescott.

Memorial: Mrs. S. C. Fulmer, Little Rock; Mrs. J. H. Fowler, Harrison; Mrs. Charles Beeby, Huntsville; Mrs. E. A. Callahan, Carlisle; Mrs. C. W. Dixon, Gould.

Doctor's Day Observance: Mrs. H. T. Smith, McGehee, chairman; Mrs. E. E. Barlow, Dermott; Mrs. I. F. Jones,

Fort Smith; Mrs. Fred Youngblood, Huntsville; Mrs. D. R. Hardeman, Little Rock; Mrs. Homer Dickens, DeWitt.

Archives: Mrs. D. W. Goldstein, Fort Smith, chairman; Mrs. Walter Klugh, Hot Springs.

Exhibits: Mrs. J. B. Jameson, Camden, chairman; Mrs. F. A. Gray, Batesville; Mrs. O. B. McCoy, Harrison; Mrs. Loyce Hathcock, Fayetteville; Mrs. T. E. Benton, Lonoke; Mrs. R. L. Hopkins, DeQueen; Mrs. J. E. Stevenson, Fort Smith; Mrs. J. T. McLain, Gurdon.

Jane Todd Crawford Memorial: Mrs. B. V. Powell, Camden, chairman; Mrs. E. C. Moulton, Fort Smith; Mrs. Joe Shuffield, Little Rock.

Cancer Control: Mrs. S. J. Wolfermann, Fort Smith, chairman; Mrs. Paul Mahoney, Little Rock; Mrs. Fred Krock, Fort Smith; Mrs. W. E. Gray, Hot Springs; Mrs. J. L. Jackson, Harrison; Mrs. J. T. Irby, Earle; Mrs. L. J. Kosminsky, Texarkana; Mrs. J. H. Hellums, Dumas; Mrs. J. J. Monfort, Batesville; Mrs. W. L. Boswell, Clarendon; Mrs. Sam McGill, Camden.

Essay Contest: Mrs. J. K. Sheppard, El Dorado; Mrs. S. A. Collom, Jr., Texarkana; Mrs. A. S. Buchanan, Prescott; Mrs. Earle Hunt, Clarksville; Mrs. C. K. Townsend, Arkadelphia.

Constitution and By-Laws: Mrs. W. R. Brooksher, Fort Smith; Mrs. T. G. Porter, Hazen; Mrs. T. S. Hare, Crawfordsville; Mrs. Decker Smith, Texarkana.

Finance: Mrs. B. A. Rhinehart, Little Rock, chairman; Mrs. B. A. Bennett, Little Rock; Mrs. C. E. Kitchens, DeQueen; Mrs. Calvin Churchill, Batesville.

Legislation: Mrs. Charles H. Lutterloh, Hot Springs, chairman; Mrs. Charles Chamberlin, Fort Smith; Mrs. R. H. Huntington, Fayetteville; Mrs. J. B. Hesterly, Prescott.

New officers for the Auxiliary to the Sebastian County Medical Society were installed at a luncheon meeting which marked the final session before summer suspension May 13th. Hostesses for the luncheon were Mrs. B. Wayne Freer and Mrs. Walter Eberle.

Mrs. M. E. Foster was installed as president to succeed Mrs. I. Fulton Jones. Other officers are Mrs. Jones, who became vice-president; Mrs. S. P. Stubbs, treasurer, to succeed Mrs. B. Wayne Freer, and Mrs. Ralph H. Weddington, secretary, to succeed Mrs. W. F. Adams.

The final report of the year's activities was made. These included the entertainment of the state auxiliary of the Arkansas Medical Society at a convention April 15, 16, and 17. Mrs. W. R. Brooksher, Jr., convention chairman, made her final report. Mrs. S. J. Wolfermann, state commander of the Women's Field Army of the American Society for the Control of Cancer, reported on the week's drive which began April 22, and expressed her appreciation for the co-operation and help of auxiliary members.

Mrs. I. F. Jones, before turning over the gavel to Mrs. Foster, thanked officers, committees and members for their support during the year and especially for their co-operation in making the convention a success.

Mrs. Foster announced the following committees: Public Relations, Mrs. Fred Krock, chairman, Mrs. A. A. Blair, Mrs. B. Bruce, Mrs. A. F. Hoge, Mrs. Carl Wilson; Hygeia, Mrs. H. H. Smith, chairman, Mrs. W. R. Brooksher, Jr., Mrs. T. P. Foltz; Telephone, Mrs. W. F. Adams, chairman, Mrs. H. C. Dorsey, Mrs. Charles S. Holt, Mrs.

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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J. S. Southard; Program, Mrs. Charles T. Chamberlain, chairman, Mrs. Walter Eberle, Mrs. J. E. Stevenson; Health, Mrs. E. C. Moulton, chairman, Mrs. C. S. Means, Mrs. S. J. Wolfermann, Mrs. P. C. McConnell; Courtesy, Mrs. D. W. Goldstein, chairman, Mrs. B. Wayne Freer, Mrs. Raymond T. Smith; Publicity, Mrs. W. F. Rose.

Mrs. Rose, who is beginning her tenth year as publicity chairman, made a report for 1939-40.

The Auxiliary will entertain husbands at a party, according to plans made at the luncheon. The time and place will be decided later.

Guests were Mrs. I. F. Jones, Mrs. J. S. Southard, Mrs. W. R. Brooksher, Jr., Mrs. S. J. Wolfermann, Mrs. M. E. Foster, Mrs. E. C. Moulton, Mrs. S. P. Stubbs, Mrs. Carl Wilson, Mrs. Ralph Weddington, Mrs. W. F. Rose and the hostesses, Mrs. Freer and Mrs. Eberle.

Mrs. W. F. Rose,
Publicity Chairman, Sebastian County
Medical Society Auxiliary.

Dear Auxiliary Members:

The Woman's Auxiliary is fortunate indeed to have as its officers the women who were installed at the meeting in Fort Smith on April 16th. Most of them are "seasoned" workers in our beloved organization; all of them are capable and earnest in their love of organized medicine and for the high standard maintained by our doctors.

During the period of my office I have spent one of the very happiest years of my life, thanks to the cordial co-operation and friendship of all officers and members whose endeavors have been so heartening.

Please accept my expression of gratitude to each of you for your many courtesies to me and your loyalty to the Auxiliary as shown by your constant consideration of its policies.

May you extend to these splendid new officers the same co-operation which I have received, is my wish for Mrs. Hathcock and her Executive Board.

Sincerely yours,

Mrs. C. E. Bess Kitchens.

BOOK REVIEWS

Compendium of Regional Diagnosis in Lesions of the Brain and Spinal Cord, a Concise Introduction to the Principles of Localization of Diseases and Injuries of the Nervous System. By Robert Bing, Professor of Neurology, University of Basel, Switzerland. Translated and Edited by Webb Haymaker, Assistant Clinical Professor of Neurology and Lecturer in Neuro-Anatomy, University of California. Eleventh Edition, with 125 Illustrations, 27 in color, and 7 Plates. St. Louis, C. V. Mosby Company, 1940.

This volume lives up to its past reputation as a most concise and practical compend of the most fascinating part of neurology. Without going into too much unnecessary detail, this book is a most valuable edition to one's library, regardless of one's field, in reviewing neuro-anatomy, or as an aid in diagnosing any lesion of the brain or cord. After the more detailed description of these various conditions, the summaries of criteria of cord and cerebral localization are most helpful.

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BOOK REVIEWS

Preclinical Medicine. Preclinical States and the Prevention of Disease by Malford W. Thewlis, M. D. Attending Specialist, Internal Medicine, United States Public Health Hospitals, New York City; Special Consultant, Rhode Island Department of Public Health; Associate Editor, Medical Times (New York) and Author of Geriatrics, Williams and Wilkins, Baltimore, 1939. Price \$3.00.

It has always been the ultimate purpose of medicine to anticipate disease before it appeared, and to take adequate steps to prevent its inception. Dr. Thewlis has, in this small volume, made an effort to consider the common disorders which are in a large sense preventable, and to outline briefly certain measures which may be undertaken to avoid the onset of illness. It is a very brave and inspiring work whose material has been drawn from rich experience in the field of preventive medicine. The style is intensely interesting and devoted, written primarily to bring to the general practitioner a fresh insight into disease prevention.

It should be a part of the library of every medical practitioner who desires to render the greatest service to his people. It represents a pioneer effort in the field of preclinical medicine, a consideration which is not to be regarded as purely idealistic. There are many practical facts of value contained in this work, accompanied by an excellent bibliography for those who will be interested enough to read more deeply.

Essentials of the Diagnostic Examination. By John B. Youmans, B. A., M. S., M. D., Associate Professor of Medicine and Director of Postgraduate Instruction, Vanderbilt University School of Medicine. Pp. 417. 32 illustrations. Price \$3.00. New York: Commonwealth Fund, 1940.

In this book the author has endeavored to discuss the more common and accepted diagnostic methods and procedures which should be employed by the general practitioner. Written with clarity and brevity, it should receive general acceptance.

Clinical Roentgenology of the Alimentary Tract. By Jacob Buckstein, M. D., Visiting Roentgenologist (Alimentary Tract Division), Bellevue Hospital, New York City; Consultant in Gastro-Enterology, Central Islip Hospital. 652 pages with 525 original illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$10.00.

This is a most excellent monograph and will find favor with all physicians interested in the roentgenological study of the gastrointestinal tract. The appeal is not to roentgenologists alone, although they will perhaps acclaim it the most. From a most extensive experience at Bellevue in the past 20 years, the author has drawn conclusions which make the book an exceptional one. Special emphasis has been placed by the author on the needs of the private practitioner and effort is made to fully acquaint him with the possibilities of roentgen diagnosis. The illustrations are unusually well done.

Introduction to Medicine. By Don C. Sutton, M. D., Associate Professor of Medicine, Northwestern University School of Medicine. Introduction by Ada Belle McCleery, R. N., Superintendent, Evanston Hospital. Pp. 642.

Illustrated. Price \$3.25. Saint Louis: C. V. Mosby Company, 1940.

The author has well compiled a text for the nurse on medicine, giving all facts which will serve the nurse while omitting the details which primarily concern the physician. All of the relationship of the nurse to the patient and to the physician are considered.

Physical Diagnosis. By the late W. D. Rose. Revised by Warren P. Elmer. Eighth edition. Revised by Harry Walker, M. D., F. A. C. P., Associate Professor of Medicine, Medical College of Virginia. Pp. 792. 295 illustrations. Price \$8.75. Saint Louis: C. V. Mosby Company, 1940.

The original work was from the pen of the late W. D. Rose, Associate Professor of Medicine in the University of Arkansas School of Medicine and was published in 1917. This went through five editions testifying to its popularity. In 1930 Warren P. Elmer, of Washington University School of Medicine, made radical revision of the book, and in 1935, again revised it. This, the eighth edition appears in 1940, was revised by Harry Walker, of the Medical College of Virginia. Here we have a thorough revision with the text conforming to present-day opinions in every respect. Dr. Walker takes the position that many physical signs are now of little value due to advances in clinical medicine. This standard text is now more valuable than ever before.



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No. 2

HEART DISEASE AND WORK*

A. A. BLAIR, M. D.

Fort Smith

I have chosen to discuss the effect of work on heart disease not only because of my own interest in the field, but because I feel, too, it is of sufficient magnitude and importance to have a place on this program. Heart disease still holds the unenviable position of being the leading cause of death in the United States. That heart disease affects about 2% of the entire population is a very well established fact.

I suppose most of you who have the responsibility of treating heart disease have the always unhappy situation of offering a prognosis or rendering an opinion as to this patient's activity, be it good or bad. Naturally many things depend on this, e. g., type of heart disease under consideration, age, previous occupation, etc. First of all, physical work and exercise do not cause heart disease, though they may precipitate or aggravate symptoms and signs of heart disease already present, and may temporarily exhaust cardiovascular reserve even in healthy individuals. While many athletes may show mild hypertrophy, there is no reason to believe that when it does occur it is harmful. Moreover it is possible for a well trained athlete to support a valvular lesion like aortic regurgitation, if mild, without symptoms, and be in a much more advantageous position physically than a person living a sedentary life with an undamaged heart.

Inasmuch as pregnancy is looked upon to cause a 25% increase of work placed on the heart and circulation, it would be unwise to pass this individual without mention. Many patients with advanced heart lesions, such as mitral stenosis, will go through pregnancy without experiencing any serious difficulty. On the other hand, mild lesions that develop auricular fibrillation may

precipitate serious disturbance. Each case must be judged individually, and it is of great importance to follow closely a cardiac patient through pregnancy. Three important conditions that warrant against pregnancy, or are usually considered a signal to terminate pregnancy, because the life of mother and infant are both in constant jeopardy, are auricular fibrillation, heart failure and advanced aortic regurgitation.

Now we have the rheumatic heart disease of childhood which requires long abstinence from work or play regardless of how trivial the first attack may seem to be. In most cases recovery is so complete after six months that only advice against violent exercise, such as cycle riding, football, basketball and the like, is necessary. On the other hand repeated attacks with further heart damage may of necessity make the prognosis extremely poor and work of any type beyond mental exercise inadvisable.

I feel that the case that gives us the greatest concern is the business or professional man who has had the responsibility as a breadwinner, who rather abruptly develops some cardiac calamity such as coronary thrombosis or acute congestive failure. Or, possibly he has become a problem for study on the basis of benign precordial pain, cardiac arrhythmia or symptoms pointing to a neurocirculatory disturbance (effort syndrome). In either instance he is in need of help, and only by painstaking study by his medical advisor will one be in a position to assist.

We must not overlook that the mentally sick individual who thinks he has heart disease makes up a large percentage of cases we see in the course of days, and offers quite a problem itself. Unwise or poorly worded opinion as to exercise or work may only serve to further invalidate this patient. Now the cardiac cripple resulting from structural damage needs carefully supervised convalescence. If he has had a coronary occlusion, six to eight weeks bed rest should be the minimum; then another six to eight weeks regain-

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 15, 1940.

ing normal activity, such as walking, driving car and spending three to six hours daily at the office, but avoiding exertion. We learn in part from the electrocardiograph that the majority of these cases will have cleared by this time. Probably 95% of all cases of heart disease are not so badly crippled but what they will be able to resume former occupations. We see many patients with heart disease who are maladjusted, very few of whom actually need occupational therapy. They may be perfectly content and happy as they are and may be utterly miserable by being advised to change their jobs. Such cases need advice as to diet, sleep and outside exercises. A patient's limitations in cardiac disease are often difficult to determine and only by observation and study of the individual case can a standard be set up for that case, as it is most humanly impossible to devise an exercise test which can be applied to their varying degrees of decompensation. We may try to arrive at this through study of certain isolated phenomena such as pulse rate, blood pressure, size of heart by flourescopy, respiratory inadequacy (dyspnea), and certain metabolic determinations. Of these dyspnea is probably the best outward signal for a patient under exercise to watch for. If he has two flights of steps to climb and feels dyspneic after one flight, that does not mean that he can not take the second flight after a slight rest and may be able to do so without running any great risk.

In closing, my honest opinion is that "crippled cardiacs" are made more disabling if too much restriction is placed upon their activities. Every cardiac that we have had any dealings with will take his prescribed bed rest, and gladly do so, but if you do not treat him with a spirit of optimism and lead him back to his normal life as quickly as is consistent with his physical condition, you are apt to be treating organic heart disease plus cardiac neurosis for many months to come.

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CARCINOMA OF THE STOMACH*

HENRY G. HOLLENBERG, M. D., F. A. C. S.

Little Rock

In the short period allotted for the discussion of this vast and very gloomy subject it is obviously impossible to consider other than a few points. I propose to emphasize the incidence of this malignancy in Arkansas and to give some indication of the proportionate number who are receiving adequate treatment. In addition I wish to outline a number of points helpful in making an early diagnosis and to indicate the treatment which most authorities consider to be adequate.

As everyone knows there is a real difference in the incidence of various malignancies in various countries and in parts of the same country. For instance carcinoma of the stomach is common in Denmark and other northern European countries, uncommon in China. It is suggested that the high protein diet of Denmark as contrasted with the high carbohydrate diet of China is partly responsible for this difference. No doubt there are many other factors.

In the United States as a whole carcinoma of the stomach is of astonishing frequency. Malignancies account for ten per cent of all deaths. Carcinoma of the stomach comprises one-third of all malignancies. Diseases of the circulatory system alone account for a greater portion of deaths. Carcinoma of the uterus is the only close competitor in the malignancy group.

It would seem to me unlikely that any real difference in the incidence of malignancy should exist in various parts of the United States. Such, however, seems to be the case as one considers mortality statistics. In this connection I should like to make a direct comparison with a north-eastern state and for no particular reason have selected New York state. The population of Arkansas is 2,000,000; that of New York state 13,000,000—6½ times as populous. There is considerable difference in the distribution of age groups. In New York the percentage of people over 45 is considerably higher than in Arkansas. Such a factor would be expected to increase the incidence of all malignancy there, and to increase the total death rate. Such is the case. In Arkansas the annual mortality from all disease is 0.8%; in New York 1.3%. We might maintain that Arkansas is more healthful. There are no doubt many factors but the difference in age

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 15, 1940.

groups is a very important one. The annual number of deaths from carcinoma of the stomach in New York is twenty times that in Arkansas instead of six and one-half times as might be expected from a comparison of population figures. The same ratio is present in other carcinomata of the intestinal tract, carcinoma of the breast, etc. The differential is even greater in some other diseases, notably diabetes, and diseases of the circulatory system, where it is forty times as great. On the other hand in many diseases the ratio is quite in accord with the populations—appendicitis, tuberculosis in all forms, peptic ulcer, and strangely enough, carcinoma of the uterus and of the skin. These figures clearly show that there is a lower incidence in reported deaths from carcinoma of the stomach in Arkansas than in New York state and this is also true in respect to the whole United States.

The actual number of deaths in Arkansas in this connection is as follows: the population is a bit less than 2,000,000; the total mortality from all causes in 1936 was something over 16,000. This is a low mortality of 0.8%. Of this mortality 1,030 were from malignancy (6% instead of the national 10%). Of these malignancies 215 were carcinoma of the stomach, about one-fifth of the total malignancy deaths. These figures show a low mortality from malignancy in this state and a low incidence of carcinoma of the stomach as compared to the incidence of malignancy.

It is possible that this figure represents practically all the cases in Arkansas but I think the question can be raised as to the number of these cases which are escaping diagnosis. As it is difficult to diagnose in some instances, they are missed everywhere. In Arkansas, however, where we have more than our share of medical cultists who can hardly make the diagnosis at all, and where the economic condition of our people is not as good as in some other states, it seems likely to me that quite a few of these victims are never properly diagnosed, not to speak of a high number diagnosed too late.

Likewise it is difficult or impossible to determine the percentage of these patients properly diagnosed who are having adequate treatment. In the city of Little Rock, which is only a small part of the state, but which might be expected to have a fair percentage of operations of this sort, I have made some inquiry. From my inquiry at the surgical pathology departments of St. Vincent's Infirmary, Baptist Hospital, and the University Hospital, I find that as a rule the total

number of stomach resections in a year can be counted on the fingers of your two hands. I do not know how much work of this sort is done in other Little Rock hospitals and hospitals throughout the state. It is impossible also to determine how many of these patients leave the state for this sort of work. This must be a small number. Surely there are few of the class who utilize the University Hospital. Judging from the number of resections done in Little Rock, and considering that resection is the only adequate treatment that can be offered for these patients, it would seem that either a high percentage of the cases in Arkansas are found entirely too late to be submitted to surgery, or else for some other reason they do not have it. I hesitate to hazard a guess as to the number of patients in Arkansas today who have a carcinoma of the stomach. Figuring from the annual reported mortality of 215 there must be at least five hundred and quite likely many, many more.

As regards the early diagnosis of carcinoma of the stomach, unfortunately the earliest signs and symptoms which appear may in reality be late ones. In some cases acute perforation, acute obstruction, or gross hemorrhage may be the onset as far as definite symptoms go. This is only another gloomy feature of the disease. In such cases the patient cannot be blamed nor can his physician.

The earliest symptoms which appear are, in great part, dependent on the exact location of the lesion in the stomach and on the morphology of the lesion. If the tumor is in a silent area, such as the body of the stomach, there will be no obstruction, only slow bleeding, and the first symptoms may not be referable to the stomach at all but to the general health of the individual. On the other hand, if the lesion is near one of the two orifices of the stomach, obstruction may be early, or at least some dysfunction of the musculature of the orifices with consequent symptoms will occur. Fortunately about one-half of all carcinomata of the stomach are in the pyloric region where some relatively early symptoms usually appear and where the tumor is also readily resectable. Another one-fourth of the tumors are in the body where symptoms are few but where they are resectable. The other one-fourth are in the dome, at the cardia, and involving the whole stomach. Many in this group manifest themselves early. The type of tumor will affect the time of appearance of symptoms in that a rapidly growing one will become extensive in a shorter period of time. In view of this fact, many

patients, especially younger people, who have well-marked symptoms and a short history have the worst prospects. The converse of this is of importance in that those who have a slow onset of symptoms over a quite long period of time often have the best prospects.

When local gastric symptoms are present they are at best indefinite, a feeling of fullness or weight in the upper abdomen, indigestion, an indescribable distress, anorexia, **coming on in an individual over forty**, who has likely had no stomach trouble before. Actual pain in the abdomen is not an early symptom nor an important one. When present it is usually continuous and more likely aggravated than relieved by food. Loss of weight and strength, anemia, may be rather early symptoms, though when well-marked, are evidences of long-standing involvement. It is only through a realization of the importance of such vague and unsatisfactory leads as these, in men and women over forty, that these cases will be picked up early. In some early cases the history may suggest peptic ulcer. The hydrochloric acid content of the stomach in early carcinomata may be increased. The low acidity so often associated with carcinoma is a late result due to chronic infection and gastritis and not due to a replacement of all acid forming tissue. It is well to remember that the anemia associated with carcinoma of the stomach is often that of a primary sort as in pernicious anemia. Glossitis and cord changes may even be present. With this in mind it is important to consider that all patients who have pernicious anemia are possibly victims of this disease. The stomach is always under suspicion in cases of pernicious anemia, particularly where response to proper therapy seems to have been retarded.

The family history is of importance. The family of Napoleon is usually cited in this connection. He, his brother, two sisters, and his mother died of it.

Of equal importance with the history is the examination for blood in the stools. Bleeding from carcinoma of the stomach is usually a slow ooze, coming from an infected, friable tumor. Acute profuse hemorrhage is less frequent than in ulcer where larger vessels may be eroded. The bleeding, however, is more continuous and does not cease after bed rest as in ulcer. Examination of the stools for blood will therefore show it in every specimen even though the patient is at bed rest. Blood, of course, is not always present and especially in cases where the

tumor is an infiltrating, scirrhus one without much or any ulceration.

Of the greatest importance in the diagnosis of carcinoma of the stomach at any stage and especially early, is the roentgenologic examination. I do not intend to speak upon this part of the examination except to emphasize its great importance and commend the roentgenologists on their keenness in diagnosing these lesions. It is only through early consideration of the possibility of carcinoma in all suspicious cases and the examination of all of them by this method that many early cases will be found. Through the radiologists observation of the contour of the filled stomach, its mobility and peristalsis, the pattern of the mucous membranes, and the manner and rate of emptying, may the earliest cases be diagnosed. Some confusion with gastric ulcer occasionally exists but a differential diagnosis may usually be made. In this connection, may I mention the use of the gastroscope which is of use in this differential diagnosis. Its use otherwise in the diagnosis of carcinoma of the stomach is superfluous because of the absolute reliability of X-ray. I have spoken of the great accuracy of the roentgenologist in the diagnosis of this disease. He cannot, however, pass upon its operability except in cases of advanced tumor of the cardia and dome. The size of the tumor is of little importance in determining the limits of operability and there is considerable error in determining at the roentgenologic examination its mobility and attachment to important structures.

In regard to treatment I wish to outline only two points. It is universally accepted that the only adequate treatment of this malignancy is surgery. Radiotherapy is hopeless and often does more harm than good because of the sensitivity of the gastric mucosa. Occasionally some palliation is possible in the more radio-sensitive tumors of the cardia and dome, and in the lymphosarcoma group which comprises less than 1% of malignancies of the stomach. As a rule the treatment is either surgical or morphine in large and adequate doses. The second point is that the only adequate surgical procedure is resection. Practically never is gastro-enterostomy alone indicated. The span of life following laparotomy alone compares favorably with that of gastro-enterostomy.

The whole problem of carcinoma of the stomach is a gloomy one. The disease is late in making itself manifest. Many patients have metastases in the rectal shelf of the peritoneal

cavity or in the liver, or the umbilicus, or Troisier-Virchow's node, or the lungs, when first seen and are then beyond operative relief. Still others are explored only to be found inoperable. The mortality after resection is high. The incidence of those definitely helped is low, probably around 15% or 20%. The five-year cures are a pitiful 5% of all who present themselves for examination, early or late. It is no wonder that many physicians are discouraged about it.

The disease is so common, however, that it constitutes a constant challenge. Remember that in the United States, one death of every thirty-five from all causes is due to carcinoma of the stomach. One of every fifty in Arkansas is from this cause. I personally deplore a defeatist attitude and feel that better results may be obtained if the disease will constantly be kept in mind by all physicians, if all suspicious cases will be examined by X-ray, and if those found to have carcinoma, will be promptly subjected to adequate surgery.

In summary and in conclusion, may I re-emphasize three points: first, that early cases of carcinoma of the stomach will be found only by having roentgenologic examination of patients with minor gastric symptoms; second, that the only treatment is surgery; and third, that the only adequate surgical procedure is radical resection.

RESOLUTION

Whereas; God in his infinite wisdom has removed from us, in the very prime of his usefulness, Doctor T. E. Benton, a man whose training peculiarly fitted him for the high vocation he followed with distinction to himself, honor to the profession, and great benefit to the laity, and

Whereas; Doctor Benton was widely recognized as one of the leading physicians of Lonoke county, having practiced his profession for the past thirty-eight years in the town of Lonoke. He was known by many as "Our family physician." What an honor in this day of specialization, for the specialist has almost obsoleted the term.

Therefore, Be It Resolved; By the Lonoke County Medical Society, that in the passing of our dear friend, Dr. Benton, this organization has lost a good member, the community an honored citizen, the home a faithful head, and the Church of God, a proved follower of its teachings, and

Be It Further Resolved; That a copy of these resolutions be spread on the minutes of this organization, a copy sent to the Journal of the Arkansas Medical Society and a copy to the family of our departed confrere.

E. A. CALLAHAN, M. D.,

F. A. CORN, M. D.,

S. S. BEATY, M. D.

CORRESPONDENCE

Arkadelphia, Ark.,
June 3, 1940.

Dear Bill:

The new issue of the Journal noted with interest. While I always peruse with edification, Random Thoughts of the Secretary, so far I have found no valid reason why they should be preserved for posterity.

Wishing you many more of the same I am,
Yours most courteously,

C. K. Townsend.

Lockesburg, Arkansas
June 4th, 1940

To the Editor:

Thanks for the "punched innovation". This will be a boon and time-saver.

Yours truly,

M. L. Norwood

Pine Bluff, Arkansas
June 5, 1940

To the Editor:

I think the punch idea is fine for keeping The Journal. Why didn't we think of this before?

Yours truly,

J. M. Lemons

Forrest City
June 1, 1940

Dear Doctor Brooksher:

I am this morning in receipt of the last number of The Journal—punched. May I state to you that personally this is very much appreciated. I only wish that I had preserved all of the copies during the years they have come to my desk.

Sincerely,

J. O. Rush.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

IN THE EARLY YEARS of this century, the term "pre-tuberculous" was used to describe children who were in contact with an adult case of tuberculosis and those who were underweight or apparently below par in health. These children, it was believed, were in need of an abundance of fresh air, rest and additional food. Special open air classes were organized for them on the theory that by such devices the development of tuberculosis might be prevented. As the years passed, the soundness of these ideas was challenged and recently a Committee on Care and Education of Below-Par Children has re-investigated the subject. Extracts of the report of this Committee follow.

THE PHYSICALLY BELOW-PAR CHILD

Many school departments make special provision for so-called "exceptional" children, including the visually handicapped, the hard of hearing, the cardiacs and those presumably in danger of developing tuberculosis. Various terms have been used to describe these children, such as "delicate, undernourished, underweight, handicapped and lowered vitality." Because open air classes have been stimulated largely by tuberculosis associations throughout the country, the National Tuberculosis Association has felt a responsibility to review the problem and therefore appointed a committee to study the situation.

Changing Concepts

In the early open air classes, emphasis was placed on malnutrition and anemia—either or both of which were considered at that time to be predisposing factors in the development of tuberculosis—and on known contacts with an open case of tuberculosis. Today it is recognized that no matter how pale or undernourished a child may be, he will not develop tuberculosis unless he actually takes tubercle bacilli into his body. Therefore the term "pre-tuberculous" is no longer acceptable and its use should be discarded. The best way to prevent infection among children is to remove the case of tuberculosis from the home. Infection in a child can be detected by the tuberculin test. Tuberculous disease in chil-

dren between the ages of 5 and 15 years is relatively unimportant; the tubercle bacilli are apparently walled off and cause little damage. The walling-off process seems to operate just as rapidly and completely if the child remains in school and participates in the normal activities of child life as when strict bed rest is instituted. A school child who has a positive tuberculin reaction, but whose X-ray reveals nothing abnormal, who is apparently in good health, and who after a thorough investigation of his associates at home and elsewhere is found not to be in contact with an open case of tuberculosis, usually does not need special care. Nor is such a child capable of transmitting tuberculosis. He is, however, entitled to the health supervision which is due every child. Throughout adolescence and early adult life he should be given an X-ray examination annually and watched.

There remains a group of tuberculous children for whom special care is necessary. These children may have such extensive infection that the body cannot well control it, or clinically serious tuberculous disease may have begun. Such children, both for their own welfare and also to protect others from the disease, need special care. The question arises whether it is not better to arrange home or institutional care for this group. Their number in any one locality is usually so small that either the expense of a special teacher for them or the transportation costs of

collecting daily in one place a sufficient number to warrant a full-time teacher, is economically impractical. It is believed that such convalescent care as is needed must be worked out in the light of available local resources.

Below-Par Children

"Malnutrition" is a loosely used term. Underweight is not necessarily a symptom of malnutrition, nor are all undernourished children underweight. The judgment of the physician based on one routine physical examination is not always dependable, for studies have shown that competent physicians vary widely in their independent judgments of nutritional status in the same children. Nutrition is not a single entity due to a single cause. Vitamin status, blood chemistry, and types and degrees of anemia are all recognized as important indices of nutrition status.

However, the physician can with some degree of reliability select those children who are physically below par. They include those who exhibit such symptoms as lack of stamina, lassitude, failure to gain weight, etc. Only a comparatively small number are below par primarily because of a condition needing medical care. For those who do need medical care the course of action should be to set the machinery going to obtain adequate medical care.

A second group are those who are temporarily below par following illness or operations. Often such a child is better off in the ordered ways of school life although he is not able to carry a full program of work and activity.

In the great majority of below-par children the cause is usually determinable only after study of the child in relation to his home and family. Poverty, ignorance and maladjustment may be factors. Only after a careful study of such factors can one hope to solve the problem.

Are Special Classes Necessary?

Special classes for "exceptional" children have undoubtedly made a contribution to the improved health of school children. One type, the open air class, has emphasized fresh air, food and rest. Fresh air has mistakenly been interpreted as meaning large volumes of outdoor air regardless of temperature. But recent studies have shown that cool air in gentle motion provides the best condition for comfort and for health. Supplementary feeding at school is open to question. Adequate food and regular meals at home are best, and supplementary feeding, if indicated, must follow the needs of the individual case.

Whatever the cause of inadequate food may be, the solution lies not in special classes, but in home adjustments. Rest is an important need for the below-par child. Open air classes have demonstrated the value of periods of rest. The amount and the duration of the additional rest requirement for the individual child should be based on medical opinion.

Special Care

Against this background of change in theories and facts the present-day problem of how to care for the below-par child must be met. Groups including the deaf, the crippled, the cardiacs and the visually handicapped need special adjustment of school procedures. For children with clinical tuberculosis special provision must be made for they are sick children. There remains a sizeable but less well defined group which includes children below par because of a condition needing medical care, or, temporarily, following an illness or operation, or from a variety of causes which may be socio-economic and related to the home. The school should provide for these below-par children a lightened school program together with extra rest. The easiest way to do this is by means of the segregated special class, but it is costly and educationally and socially unsatisfactory. How can the school best meet its problem?

The school physician can in the course of school physical examinations, select the below-par group for intensive study. The school physician, nurse, and teacher can by follow-up study of the child, the parents and the home, gain a better understanding of the underlying causes of the condition. These causes can, to a large extent, be removed or mitigated, by making social and economic adjustments in the home.

In summary, the responsibility of the care of the below-par child should be divided between the home and the school. Segregation in special classes is not necessary and is detrimental to the child's education and social development. Supplementary feeding at school is open to question. School procedures should be adopted for individual children to provide for rest periods, a lightened school program with avoidance of undue strain, and attendance at regular classes for as much of the academic program as the child is able to carry. This program, formulated for elementary school children should also be extended to junior and senior high school students.

The Physically Below-Par Child. Publication of the N. T. A., 1940.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

ADEQUATE DEFENSE

No editorial writer presumes these days to write for publication two or three weeks later on any subject which may be remotely associated with the effects of the war across the seas. There action is lightning-like in its swiftness; the results follow so rapidly that clear thinking and any appraisal of the remote effects must, of necessity, resolve itself into a long-range program. However, none can now deny the wisdom of an adequate defense of America for Americans and American Institutions. We have no alternative but to prepare for proper protection; this is the immediate problem for these United States.

None can prophesy what the future holds for this land of ours. It is obvious that the delayed effects of the war, as well as present disturbing problems, will affect the United States for a long time to come. Doubtless, serious disruptions of our social and economic order will follow.

A new responsibility is, therefore, laid on the shoulders of the medical profession. We must earnestly study and plan for the continued health

of the American people. More active organization is essential, able leadership is imperative, if American medicine is to continue to furnish the American public with the best medical care in the world. Physicians must be aroused to an appreciation of these matters. Medical organization must be militant, unified, studious.

VACATIONS

The summer months have a meaning for many of our patients. It is the time of year when they take off to different surroundings and become mentally and physically refreshed. Vacations, properly taken, are a great boon to all of us. The Journal expresses the hope that all members of the Society will so arrange their affairs that they may take a long or short sojourn away from the cares of medicine and return refreshed and stimulated for new problems, to the solution of which they will bring renewed enthusiasm and energy.

PRIMARIES

But a few weeks hence, Arkansas will hold a primary election. Many issues will appear in the respective campaigns. This biennial task is not to be shirked by the members of organized medicine. Physicians, as all voters, should realize that it is their duty to elect competent, trustworthy and honest officials, officers who seek to give the people of Arkansas, as well as the nation, the best of government.

There is a place for the doctor in politics. We do not mean that doctors, as a profession, should enter actively into a political campaign designed to elect any one man or set of men to office, but we do mean that the physicians of Arkansas should make it their business to see that honest and upright men, men who have the best interests of the citizens at heart, receive their vote and cordial support.

The attitude of many candidates toward issues of the day may be well known to the physicians of our respective communities. If not, it is the duty of the profession to ascertain what ideas and motives attend the various candidates. Obviously men who show no disposition toward the support of the altruistic motives of the organized medicine are unfriendly to the cause of the profession. We feel, further, that a lack of appreciation of the ideals of the medical profession indicates a lack of appreciation for measures which tend to the greater benefit of the citizens of the state.

PROCEEDINGS OF SOCIETIES

The Ninth Councilor District Medical Society met in Harrison, June 4th, for the following program: Address, H. T. Smith, McGehee; "Syphilis," D. W. Dryska, Little Rock; "Knee Joint Injuries," F. Walter Carruthers, Little Rock; "Diagnosis of Common Kidney Ailments," T. Duel Brown, Little Rock; and "Differential Diagnosis Between Acute Conjunctivitis, Acute Iritis and Acute Glaucoma," M. E. Rust, Harrison. A banquet followed the scientific session.

Twenty-five physicians were present for the annual banquet session of the Crawford County Medical Society held at Dixie Inn, Mulberry, May 28th. The program was informal.

B. B. Bruce, Secretary.

The Benton County Medical Society met in dinner session at Pea Ridge, June 13th, for a Symposium on Heart Disease by Chas. T. Chamberlain, Ralph E. Crigler, and William O. Arnold, Fort Smith.

George M. Love, Secretary.

The Pulaski County Medical Society was addressed, June 17, by S. C. Fulmer, "Nephritis."

E. H. White, Secretary.

The Arkansas County Medical Society was addressed, June 11th, by J. K. Walker, "Obstetrics," and H. A. Causey, "Certain Types of Tumors," both speakers of Pine Bluff.

The Ninth Councilor District Medical Society has elected the following officers: President, Ross Fowler, Harrison; Vice President, D. K. McCurry, Green Forest, and Secretary-Treasurer, J. G. Gladden, Harrison.

P. L. Hathcock, Sr., Fayetteville, addressed the Sebastian County Medical Society, June 11th, on "Aleukemic Leukemia."

Ralph E. Weddington, Secretary.

The Ouachita County Medical Society and the Auxiliary were entertained at Stephens by Dr. and Mrs. J. P. Clemens, June 6th. A banquet preceded the program. Dr. H. T. Smith, President of the Arkansas Medical Society, spoke on "The Physician's Responsibility." A motion picture on "Normal Labor" was shown.

R. B. Robins, Secretary.

The Sevier County Medical Society was addressed recently by R. L. Hopkins on "Socialized Medicine in England."

S. P. Cromer, Little Rock, addressed the Tri-County Medical Society at Arkadelphia recently.

COMMITTEES FOR 1940-41

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—Euclid Smith, Hot Springs National Park, Chairman (1943); R. B. Robins, Camden (1942); E. C. Moulton, Fort Smith (1941); W. R. Brooksher, Fort Smith (ex-officio).

MEDICAL LEGISLATION—Jos. F. Shuffield, Little Rock, Chairman (1943); C. W. Dixon, Gould (1943); Stanley M. Gates, Monticello (1943); Euclid Smith, Hot Springs National Park (1942); W. G. Hodges, Malvern (1942); M. L. Norwood, Lockesburg (1941); W. G. Eberle, Fort Smith (1941).

HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Little Rock, Chairman (1943); M. C. Crandall, Wilmot (1943); C. J. Steed, Gurdon (1942); J. B. Askew, Batesville (1942); E. J. Munn, El Dorado (1941); H. Fay H. Jones, Little Rock (1941).

MEDICAL EDUCATION AND HOSPITALS—S. J. Allbright, Searcy, Chairman (1942); J. W. Amis, Fort Smith (1943); Alan G. Cazort, Little Rock (1941).

PUBLIC RELATIONS—W. T. Wootton, Hot Springs National Park, Chairman (1942); H. A. Rands, Dumas (1943); G. R. Siegel, Clarksville (1941).

MEDICAL ECONOMICS—C. E. Dungan, Augusta, Chairman (1943); J. H. Hellums, Dumas (1943); J. B. Hesterly, Prescott (1942); F. A. Corn, Jr., Lonoke (1941); A. F. Hoge, Fort Smith (1942); Paul Mahoney, Little Rock (1942).

SCIENTIFIC EXHIBIT—Sam Phillips, Little Rock, Chairman (1943); C. S. Moss, Hot Springs National Park (1941); G. G. Woods, Huntington (1942); Lawrence Zell, Little Rock (1943).

NECROLOGY—Thos. Douglas, Ozark, Chairman (1943); L. T. Evans, Batesville (1941); C. A. Archer, DeQueen (1942).

CANCER CONTROL—Fred H. Krock, Fort Smith, Chairman (1943); J. S. Stell, Hot Springs National Park (1942); L. M. Smith, Russellville (1941); Jeff Baggett, Prairie Grove (1942); Vincent O. Lesh, Fayetteville (1943).

SPECIAL COMMITTEES

MATERNAL AND CHILD WELFARE—S. A. Thompson, Camden, Chairman; Don Smith, Hope; R. D. Dickens, Monticello; Charles Wallis, Little Rock; P. H. Phillips, Ashdown; J. H. Fowler, Harrison; Marion B. Leverett, McGehee; L. C. Barnes, Hamburg; Earle H. Hunt, Clarksville; C. B. Billingsley, Fort Smith; J. W. Branch, Hope; Clyde D. Rodgers, Little Rock; W. A. Snodgrass, Jr., Pine Bluff; E. C. McMullen, Pine Bluff.

HEART—A. G. Sullivan, Hot Springs National Park, Chairman; A. A. Blair, Fort Smith; O. C. Melson, Little Rock; John N. Compton, Little Rock.

CONTROL OF SYPHILIS—Louie G. Martin, Hot Springs National Park, Chairman; D. W. Goldstein, Fort Smith; L. F. Barrier, Little Rock; W. J. Hunt, Warren.

POSTGRADUATE STUDY—D. A. Rhinehart, Little Rock, Chairman; Jos. F. Shuffield, Little Rock, Secretary; R. R. Kirkpatrick, Texarkana; E. E. Barlow, Dermott; J. P. Clemens, Stephens; C. L. McNeil, Rogers; M. C. Hawkins, Jr., Searcy; J. P. Price, Monticello; Rufus Martin, Warren; J. H. Burge, Lake Village; C. S. Holt, Fort Smith; H. W. Hundling, Little Rock; L. J. Kosminsky, Texarkana; Earle H. Hunt, Clarksville; H. King Wade, Hot Springs National Park; Virgil Payne, Pine Bluff.

AUXILIARY—A. S. Buchanan, Prescott, Chairman; E. C. Moulton, Fort Smith; O. J. T. Johnston, Batesville.

STUDY OF MIDWIFERY—J. B. Jameson, Camden, Chairman; Fount Richardson, Fayetteville; J. M. Lemons, Pine Bluff.

LIASON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—D. T. Hyatt, Little Rock, Chairman; A. C. Shipp, Little Rock; H. A. Stroud, Jonesboro; Guy Hodges, Rogers; E. E. Barlow, Dermott.

INDUSTRIAL HEALTH—E. E. Barlow, Dermott, Chairman; M. E. McCaskill, Little Rock; M. C. Hawkins, Jr., Searcy; M. E. Foster, Fort Smith; H. A. Stroud, Jonesboro.

MENTAL HYGIENE—A. C. Kolb, Hope, Chairman; Geo. B. Fletcher, Hot Springs National Park; Pat Murphey, Little Rock.

PERSONALS AND NEWS ITEMS

W. A. Snodgrass, Jr., Pine Bluff, took special work at State Sanatorium during May.

H. J. Mayfield, El Dorado, addressed the American Association of University Women of that city in May.

R. H. Ray, Earle, has erected a new office building.

Dewell Gann, Sr., has been elected treasurer of the Benton chapter of Royal Arch Masons.

D. A. Rhinehart, Little Rock, addressed the American Society of X-ray Technicians at Memphis, May 29th, on "The Professor Gives a Quiz."

S. J. Wolfermann, Fort Smith, spent a May vacation in deep-sea fishing at Port Aransas.

Temporary appointments as heads of the departments of medicine and surgery of the University of Arkansas School of Medicine have been made S. C. Fulmer and H. A. Higgins, respectively.

Dr. and Mrs. A. F. Hoge, Fort Smith, attended commencement exercises at Tulane University School of Medicine, New Orleans, where their son, Marlin, graduated.

Dr. and Mrs. Geo. B. Fletcher, Hot Springs National Park, attended the graduation of their son, Jack, from Sewanee Military Academy in June.

Dr. and Mrs. M. E. McCaskill, Little Rock, attended the graduation of their son, Melvin, from Washington and Lee University in June.

H. King Wade has been elected a director of the Chamber of Commerce at Hot Springs National Park.

Frank Vinsonhaler gave the memorial address for the Military Order of the World War at Little Rock, May 26th.

S. A. Thompson has been elected a director of the Camden Lions Club.

The following were registered at the New York session of the American Medical Association: E. E. Barlow, Dermott; W. R. Brooksher, Fort Smith; G. E. Cannon, Hope; S. P. Cromer, Little Rock; D. W. Goldstein, Fort Smith; Fred Hames, Pine Bluff; A. H. Hathcock, Fayetteville; C. E. Kennedy, Smackover; R. H. Johnson, Clarksville; Ruth Ellis Lesh, Fayetteville; Vincent O. Lesh, Fayetteville; Jim McKenzie, Hope; J. A. Moore, El Dorado; G. K. Stephens, Newport; J. E. Stevenson, Fort Smith, and J. B. Wharton, El Dorado.

The Alumni of the University of Arkansas School of Medicine met in dinner session at Little Rock June 3rd. Speakers were S. C. Fulmer and R. J. Calcote. The following officers were elected: President, Fount Richardson, Fayetteville; Vice-president, G. W. Reagan, Little Rock, and Secretary-treasurer, T. Duell Brown, Little Rock.

Drs. C. A. Archer and C. E. Kitchens recently addressed the Housekeeping Aid project at DeQueen.

O. J. T. Johnston, Batesville, has moved to a new office building.

BORN—On June 4th, a son to Dr. and Mrs. Rowland R. Robins, Camden.

J. B. Elders has moved from Walnut Ridge to Harrisburg.

A. C. Shipp attended the National Tuberculosis Association meeting in Cleveland recently as director from Arkansas.

Staff appointments announced at the University Hospital, Little Rock are: Medicine, S. C. Fulmer, Chief, Doyle Fulmer, D. T. Hyatt, C. Lewis Hyatt, R. E. McLochlin, F. W. Harris, Alan G. Cazort and H. A. Dishongh; Surgery, H. A. Higgins, Chief, Geo. V. Lewis, C. C. Reed, Jr., R. T. Smith, D. R. Hardeman, H. G. Hollenberg, J. K. Donaldson, Harry Hayes, Robert Caldwell, F. Walter Carruthers and H. Fay H. Jones.

Dr. and Mrs. D. A. Rhinehart, Little Rock, were hosts for a dinner to Beta Theta chapter of the Phi Beta Pi fraternity of the medical school recently.

Dr. and Mrs. H. W. Hundling, Little Rock, spent a recent vacation in Iowa.

Dr. and Mrs. F. A. Gray, Batesville, spent a recent vacation in Louisville.

L. T. Taylor is erecting an office building at Star City.

J. A. Saliba is erecting a clinic building at Blytheville.

E. J. Easley has assumed temporary duty as health director of unit No. 3 at Arkadelphia.

N. T. Hollis, Little Rock, has been elected to membership in the American Psychiatric Association.

W. F. Shearer has been appointed city physician at Little Rock.

R. M. Jernigan, Jonesboro, is asking special work in proctology in New Orleans.

T. Duel Brown, Little Rock, has been elected first vice-president of the Alumni Association of the University of Arkansas.

OBITUARY

RAYMOND T. SMITH, age 46, of Fort Smith, died June 2nd of injuries sustained in an automobile accident less than twelve hours previously. Born February 19, 1894, in Saint Paul, Minnesota, he spent the greater part of his life in Mississippi where he obtained his preliminary education. Subsequently he attended Northwestern University and Loyola University School of Medicine from which he graduated in 1926. Following a four-year internship, he took special work in Vienna and located for practice of eye, ear, nose and throat at Natchez, later joining the Holt-Krock Clinic at Fort Smith in 1934. Active in civic affairs, he was president of the Fort Smith Kiwanis Club at the time of his death, immediate past-president and present secretary-treasurer of the Arkansas Hospital Association, a member of the Phi Chi fraternity and of the First Presbyterian Church. In addition to his membership in the Sebastian County Medical Society, the Arkansas Medical Society and the American Medical Association, he was a Fellow of the American College of Surgeons, secretary of the Clinical Staff of Sparks Memorial Hospital and a member of the staffs of Sparks Memorial and Saint Edward's Mercy Hospitals in Fort Smith. Surviving relatives are his wife and a sister.

WAYNE NEAL FREEMYER, age 56, of Little Rock, died May 30th. A graduate of the University of Arkansas School of Medicine in 1912,

he served with the army medical corps during the world war and was a member of the Pulaski County Medical Society, the Arkansas Medical Society, the Southern Medical Association and the Lions Club. He was a member and a steward in the Winfield Methodist Church. Surviving relatives are his wife and three sons.

WILLIAM LEE PATTERSON, aged 60 years, of El Dorado, died May 19th. A native of the Hibank community, he was educated at Ouachita College and received his medical degree from Memphis Hospital Medical College in 1910. He practiced in Louisiana for several years but had been in continuous practice at El Dorado since 1920. He was a member of the Church of Christ and of the Masonic lodge. Surviving relatives are a wife, a son and a daughter.

WILLIAM T. McDONALD, age 73, died at his home in Naylor, May 26th. Born at Gainesville, Alabama, October 17, 1866, he received his medical training at the University of Arkansas School of Medicine and had practiced in Faulkner county for 45 years. For the past 20 years he had been located at Naylor. In addition to his membership in the Faulkner County Medical Society and the Arkansas Medical Society, he was a member of the Mount Vernon Baptist Church. Surviving relatives are his wife, a son, and four daughters.

RANDOM THOUGHTS OF THE SECRETARY

May 28th. To Mulberry where the Crawford County Medical Society entertains in great style and all present most appreciative of the hospitality. Kirksey confounds the ultra-scientific with quotations from a text of 1825, mentioning, among other pathological states, "dry-bellyache," concerning which there is no knowledge in the assemblage. Kirkland, as toastmaster, reveals some "skeletons in the closet" to confuse the dignity of Dorsey and Stewart. Returning, Blair tunes in the ball game where St. Joe is punishing the local lads.

May 30th. Going western according to annual custom, the city is treated to a new spectacle today as Foltz joins (temporarily) the governor's motorcycle escort parade down the main stem.

June 1st. More governors and more motorcycles. There is some peculiar quirk to this motorcycle escort of dignitaries which we have not as yet fully explored.

June 3rd. As we have grown to expect, these last days prior to get-away become crowded with things to do and we keep in a dither all day long.

June 5th. With subdued excitement the three of us set forth for the east on an extensive motor tour traveling familiar territory to Memphis whence in the late evening we journey across western Tennessee stopping for the night at Bolivar for a much desired rest, more comfortable than we had expected. At Forrest City, we dine with Aycock but find the place not quite up to recommendations we have previously given the establishment. Here it is we see Councilor Rush, still with cane for ambulatory assistance, but cheery as always.

June 6th. Continuing across the hills of Tennessee, passing venerable Sewanee where we doubtless just miss George and Vera Fletcher on hand for Jack's graduation. Thence, further east into the copper country, a true surprise for us to find this small geographical and mineral counterpart of Arizona so close to home. Today's scenic feature is the marvelous panorama from Lookout Mountain where we relive, in imagination, the days of November 23-25th, 1863, but retain for all time the beauties of Moccasin Bend of the Tennessee, the city to the north and east, verdant hills and meadow land to the south and west. For the extreme eastern mountain section with its abrupt hillside farms, miserly in size, and undoubtedly more niggardly in their fruits of the soil, we merely register the impression that no more shall we feel that Arkansas tenant farmers are so low in the scale of human endeavor. This night to Waynesville at the foothills of the Great Smokies, a mountain range appropriately named, the smoky blue haze gently resting along all ridges and peaks.

June 7th. In Asheville today, called the "Land of the Shy," owing its metropolitan grandeur of this day to its discovery as a humdrum mountain hamlet years ago by a capitalist who could see profit combined with the beauties of nature. With the accompanying beauty and majesty of the Great Smokies for quite a way on to Johnson City and then more of those disturbing hill side farms which make us wonder if many of the tales we have heard of one leg longer than the other and other freaks of anatomy and architecture said to exist in this country may not be more fact than fancy. Passing down main street of Bristol, Virginia-Tennessee, which goes Texarkana one better by placing

small bronze state line markers in the middle of the street. For the night we stop at Natural Bridge which, with all due commercialism is revealed in awesome light to the accompaniment of man-made illumination, but lightning in the heavens dwarfs man's spectacle for those of us fortunately present on this particular evening.

June 8th. Through historic Lexington, Staunton and through the famed Shenandoah Valley of Virginia, some forty miles of which we traverse along the crests of the Blue Ridge mountains, termed, with decided lack of originality, "Sky Line Drive," and offering no inducements for a return passage to these seasoned hill climbing tourists. Along the Potomac late this afternoon we see the Mayflower steaming downstream, later to learn that it was on this cruise that the President worked on the speech pledging aid to the Allies, delivered at Charlottesville. Ascending the Washington Monument by elevator we have the inspiring view of the capitol city, many of whose buildings and structures we are readily able to identify. With difficulty, since some one must have moved the markers from U. S. 1, we maneuver through the Saturday night traffic of Baltimore, finally reaching Bel Air, Maryland, where, once upon a time, in the company of Goldstein, we learned that a sharp left turn is located in this village, its existence still unfamiliar to many a driver as countless squealing brakes testify throughout the night.

June 9th. In succession, Maryland (where we lose a hat), Delaware, Pennsylvania, stopping at Philadelphia, where the youngster takes an elementary lesson in American history at Independence Square and, youngster-like, puts a finger into the crack of the Liberty Bell. Encountering our first heavy traffic of the east at Camden in one of those traffic separation puzzles, we negotiate it successfully and press onward, confident of our ability to move into the great city with the best of them, as we do, seeing little of note, the Lincoln tunnel passage of slight interest, and into the big town, where we locate ourselves in our favorite New Yorker. In the evening, indulging our personal desires under the guise of education of youth, we attend the performance at the Planetarium, as thrilling to us as ever.

June 10th. To the House of Delegates where we see Barlow and busy ourselves with greeting many of the assemblage and spend the major portion of the afternoon with a reference committee. At night, gratifying one of the youngster's whims, all fare forth to the Fair, a cold drizzle marring enjoyment but surviving one elimination contest, we must of necessity remain in an effort to be the one lucky individual of 200, thus receiving a new automobile, compliments of the Fair. The contest over, we now count ourselves among the 199.

June 11th. Again with the reference committee and with the affairs of the House Delegates all this day, but at night, joining in the laughter which "Hellzapoppin" brings in the wildest, craziest entertainment we have yet seen.

June 12th. Viewing the exhibits and then climbing 168 steps up and 168 steps down the Statue of Liberty with the youngster, pleased that we were able to make it but far more happy over the thought that surely we will never do this again. Doing the Aquarium, we stumble into a passageway wherein an autopsy on an alligator is in progress, one of the unusual sights to which we have been treated in a lifetime of seeing some of the odd things of this world. Again to the

Fair this night, more convinced than ever* that it is but a magnified, glorified carnival, yet much fun.

June 13th. The House concludes its activities and we promptly move out on the Henry Hudson parkway along the Hudson, glimpsing the Normandie and Queen Elizabeth at adjoining piers, over the George Washington bridge into New Jersey and all the way to Binghamton, where once we assumed the possession of great scientific knowledge and a professional skill as an interne which harsh years intervening have so well taught us must have been rather a bore to our elders.

June 14th. For a brief visit to the old hospital, now grown, by alphabetical aid to an institution nearly three times its former size, and presenting to our searching investigation, no bronze plaques commemorative of our service to humanity and the institution in the year 1919-1920. Today Paris, "The City of Light" is covered with the darkness which is slowly spreading all over Europe and men's hearts everywhere are troubled, it being most difficult to make one's inner self believe that no matter how long or dark the night, that the sun will again shine in the morning. Yet, this is the faith which this troubled world must have, lamps must be lighted, wicks cleaned, if darkness is to be overcome and peace and the love of humanity are to again reign as was surely planned in the beginning.

June 15th. Leaving Buffalo this morning, we cross into Canada, eager for what a day across the line may bring. The northern drive to Niagara shows an appreciation of scenic beauty which our side can not present, commercialism being practically non-existent. Nearing Niagara, we come upon barricades to the power plant and uniformed sentries, but are permitted to view the Falls with negligible restriction. To Hamilton, London, Saint Thomas, seeing uniforms all the day, but in number only at London and Saint Thomas, which are training centers. Greatly impressed with the "business as usual" attitude of these Canadians, the absence of furor and excitement, the small, dignified posters offering war savings certificates in the bank windows, only two recruiting signs, and no colorful posters as we are accustomed to regard as essential to the prosecution of war in this land of ours. Leaving Ontario, refreshed in mind and spirit by contact with the calm determination of these people, we enter the United States at Detroit, carrying with us remembrances of orderly, well-kept fields, flowers in every yard and miles of maple-bordered highways.

June 16th. From Toledo along the muddy Maumee, the mecca of numerous picnic parties today, struggling through the worst meal we can ever recall at Defiance, Ohio, into Shanklin's beloved Indiana, serenely beautiful and quiet in what we would call early spring. Why Hoosiers love the place so well may be answered by but a short motor trip across the countryside in any direction. Every Riley lover owes himself at least a day of contemplation alongside the road as it crosses valleys and sloping hills. Into Terre Haute for the night, detours to the right and left of the main street, but eventually reaching the comfort of the Deming, favorably remembered from a stay in 1934.

June 17th. A short jump from Terre Haute into Illinois and a long drive across the narrow projection of this state, successful for the first time in completely avoiding Saint Louis in an east-west trip and duly elated at this accomplishment.

June 18th. Springfield, Missouri gives us the most restful and comfortable night of the entire trip and we depart with regret this morning, reaching home uneventfully, tired, happy, and carrying a kaleidoscopic composite view of highway markers, hills, valleys, streams, boats, people, more people, cities, villages, flags and innumerable other objects with us for many a day henceforth.

THE LOUISVILLE MEETING

Hobby and Art Exhibit

"No man is really happy or safe without a hobby and it makes precious little difference what the outside interest may be."—Sir William Osler.

Many physicians indulge themselves in a hobby that invades the fields of fine arts, and frequently their excellent work is not only self-satisfying but interesting enough to display to their friends. Consequently, this year the Southern Medical Association is sponsoring a HOBBY SHOW to exhibit pictures, handicraft and anything its members may wish to present.

The exhibit will be non-competitive and open to physicians who are members of their state and county medical societies in the territory from which the Southern Medical Association draws its membership. The Hobby Exhibit will be placed near the Scientific Exhibit at the Louisville meeting. Any physician interested, who has a hobby to exhibit, is requested to write for a special form on which to give the Hobby Committee the information needed about the display. Forms may be secured from Dr. Jesshill Love, Chairman of the Hobby Committee, 1010 Brown Building, Louisville, Kentucky, or the Southern Medical Association, Empire Building, Birmingham.

EDITORIAL, Southern Medical Journal, volume 33, number 6, June 1940, page 665.

CORRESPONDENCE

To the Editor:

I would at this time like to have you extend through the medium of the "Journal" an invitation to all of the doctors in Arkansas to be our guests at the Third Annual Johnson County Peach Festival to be held in Clarksville the latter part of July of this year.

There will be plenty of fruit for everyone, lots of queens, many bands, a speaker of national fame, and lots of other things that I am sure will be of interest. Please extend this invitation for me.

Sincerely yours,

G. Reginald Siegel, M. D.,
General Chairman.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Greetings to the Members of the Woman's Auxiliary to the Arkansas Medical Society:

The past four weeks have been busy ones for me, but such interesting ones. I have appreciated the prompt response to all my communications, and the fine spirit in which you have started the year's work. I am counting on each one of you to help carry out the splendid program of the State and National Auxiliary.

Mrs. Fount Richardson and I have been to two district meetings, the first one at Clarksville, at the home of Mrs. Earle Hunt, with Mrs. James Kolb and Mrs. G. R. Siegel, as co-hostesses, and the second one at Brinkley, at the home of Mrs. E. D. McKnight, with Mrs. Howard McKnight and Mrs. Kathleen Stout, as co-hostesses. We enjoyed our fellowship with these women so much and their wonderful hospitality. We are looking forward to meeting with all of you before the year is over.

The fifth district met with Mrs. L. G. Fincher presiding, and I am so happy to tell you that Columbia county was organized. Mrs. Joe Rushton of Magnolia, Arkansas, was elected president. Mrs. John H. Wilson, Vice President, and Mrs. W. P. Cooksey, Secretary and Treasurer.

I want to thank Mrs. L. G. Fincher, El Dorado; Mrs. Robins, Camden; Mrs. J. Murry Smith, Smackover, and Mrs. J. B. Jameson, Camden, for organizing Columbia county, and I want Columbia county to know how happy we are to have them in the State Auxiliary.

It was with regret that I learned of the passing of Mrs. Seale Harris of Birmingham, Alabama. Mrs. Garrison called to tell me, and after talking with some of our women, we decided to send flowers immediately. Mrs. Harris has been a wonderful force in Auxiliary work, not only in her own state, but in the Woman's Auxiliary to the S. M. A. and in the Woman's Auxiliary to the A. M. A. She will live on in the hearts of those who knew and loved her and in her many accomplishments. We are grieved over our loss.

Just as soon as I return from the meeting of the A. M. A. in New York City, I will write to you and give you some of the new ideas. In the meantime, begin to plan your work in order that you may work your plan.

May you have a most successful year's work!

Sincerely yours,

MRS. ALFRED H. HATHCOCK,

President of the Woman's Auxiliary
to the Arkansas Medical Society.

The second meeting of the Woman's Auxiliary to the Ouachita County Medical Society was a dinner meeting at the Ouachita Hotel. Mrs. R. J. Calcote of Little Rock and Mrs. Corn of Lonoke were out-of-town visitors. The after dinner business session was devoted to appointing committees and making plans for the year. Reports of the State Convention were heard before the meeting adjourned.

The Auxiliary to the Columbia County Medical Society was organized May 16, 1940, and the following officers were elected: Mrs. Joe F. Rushton of Magnolia, Presi-

dent; Mrs. John H. Wilson, Vice President; Mrs. W. P. Cooksey of Magnolia, Secretary-Treasurer; Mrs. R. B. Robins of Camden, Chairman of District Five. Mrs. L. C. Fincher and Mrs. J. Murry Smith were visitors from Union county.

On May 16th the State President, Mrs. Alfred Hathcock, was guest of The Woman's Auxiliary to the Monroe County Medical Society, who were hostesses for the Third District Meeting held at Brinkley. The afternoon business meeting was held at the home of Mrs. E. D. McKnight, after which there was a lovely tea.

A dinner honoring the State President was held at 7:00 p. m. at the Hotel Rushton.

The Auxiliary to the Southeast Medical Society was entertained at the home of Dr. and Mrs. H. T. Smith of McGehee. The hostess had arranged tables around the fireplace in the lovely garden where many flowers were in bloom, but an untimely shower forced the party indoors, where tables were placed in the sun parlor and a picnic luncheon served.

A business session followed with Mrs. Charles Dixon presiding, when Mrs. E. E. Barlow and Mrs. Smith gave reports of the State Convention held in Fort Smith.

Mrs. W. J. Schwarz of Lake Village was elected Vice President, and Mrs. B. E. Barlow of Dermott was received as a new member.

Plans for the year were discussed.

The social hour was spent in playing games when many prizes were won.

Mrs. Earle H. Hunt, Mrs. J. M. Kolb, and Mrs. G. R. Siegel were hostesses at a lovely dinner at the home of Mrs. Hunt, complimenting members of the Auxiliary to the Arkansas Society.

Baskets of gladioli decorated the rooms in which the guests sat. A bowl of lovely yellow tulips centered the dining table and yellow candles softly lighted the room.

Covers were laid for Mrs. S. P. Cromer, Mrs. Allen Cozart, Mrs. Raymond Cook of Little Rock; Mrs. Alfred Hathcock and Mrs. Fount Richardson of Fayetteville; Mrs. D. W. Goldstein of Fort Smith; Mrs. Roy Millard and Mrs. Robert Hood of Russellville; and Mrs. J. S. Kolb and Mrs. Will Hunt, Jr., of Clarksville.

Mrs. J. Murry Smith of Smackover was installed as President of the Union County Medical Auxiliary at the April meeting which was held at the home of Mrs. M. V. Russell. She succeeds Mrs. L. G. Fincher. Mrs. Berry Moore was elected Vice President; Mrs. Bruce Crowe, Secretary, and Mrs. G. C. DeBolt, Treasurer.

A \$20 donation to the Isle B. Oates fund was voted.

Mrs. Smith and Mrs. Fincher were delegates from Union county to the State Convention in Fort Smith.

The April meeting of the Bowie-Miller County Medical Auxiliary was held at the home of the President, Mrs.

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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Ralph Cross, with Mrs. John T. Porter, Mrs. L. H. Lanier, Mrs. Perry Priest, and Mrs. R. R. Kirkpatrick, as co-hostesses.

The loveliness of the rooms was further enhanced with an abundance of spring flowers.

Committee reports were heard and it was announced by Mrs. J. T. Robison that a poster made by Billy McDuffie, Texarkana High School student, for the Auxiliary showing its accomplishments for the year was one of three selected at the Arkansas Medical meeting in Fort Smith to be forwarded to the American Medical meeting in New York in June where it will be subject for an award.

Mrs. N. B. Daniel, chairman of Cancer Control Committee, stated that all clubs in the city were contacted by the Auxiliary and the Public Health Office, and the funds procured were forwarded to the cancer control headquarters for research work. The Auxiliary went on record as being most appreciative of the generous publicity given by the local newspapers in connection with this work and for the time over the radio broadcast.

Mrs. Perry Priest, speaker for the afternoon, gave an informative paper on an article from *Hygeia*, choosing the Waggoner bill which provides for hospital and medical aid to those in outlying areas.

At the conclusion of the meeting guests were invited to the dining room for an ice course. The table which was centered with a white venetian urn, was unusually attractive with its arrangement of red radiance roses and pussy willow. Mrs. Tyson, President-elect, presided at the service.

The Woman's Auxiliary to the Pulaski County Medical Society held the April meeting at the home of Mrs. W. A. Snodgrass, with Mrs. D. M. Switzer, Mrs. D. T. Hyatt, Mrs. C. E. Witt, and Mrs. C. A. Arkebauer, as co-hostesses.

The buffet luncheon was served from the dining table which was covered with a lovely lace cloth over gold satin and centered with a bowl of tulips. Mrs. L. F. Barrier and Mrs. S. C. Fulmer presided at the silver service.

Reports were given by the officers and committee chairmen at the business session, presided over by Mrs. L. F. Barrier, President.

Installation of officers for 1940-41 were as follows: Mrs. S. C. Fulmer, President; Mrs. A. C. Shipp, President-elect; Mrs. J. Palmer Shepard, First Vice President; Mrs. J. B. Crawford, Second Vice President; Mrs. B. A. Bennett, Secretary; Mrs. R. E. McLochlin, Treasurer; Mrs. W. A. Sadler, Publicity Secretary; Mrs. C. E. Witt, Historian; Mrs. W. L. Langston, Parliamentarian, and Mrs. M. E. McCaskill, Mrs. W. A. Snodgrass, Mrs. A. C. Shipp, Mrs. B. A. Rhinehart, Mrs. Harvey Shipp, and Mrs. Homer A. Higgins, delegates.

There were thirty-two members present, and Mrs. Chas. O. Porter was a guest.

Entertaining their husbands and other guests, members of the Auxiliary of the Sebastian County Medical Society were hostesses at a picnic supper, May 21st, at the home of Dr. and Mrs. S. J. Wolfermann. Supper was served in the garden. Afterwards there was an informal program of games in the recreation room of the Wolfermann home.

Mrs. Wolfermann, Mrs. W. R. Brooksher, Jr., Mrs. J. Fulton Jones, Mrs. Everett Foster, and Mrs. M. E. Foster comprised the committee arranging the event.

Besides the host and hostess the guests were: Dr. and Mrs. W. R. Brooksher, Jr., Dr. and Mrs. E. C. Moulton, Dr. and Mrs. I. Fulton Jones, Dr. and Mrs. A. A. Blair, Dr. and Mrs. D. W. Goldstein, Dr. and Mrs. Carl Wilson, Dr. and Mrs. Walter G. Eberle, Dr. and Mrs. Charles T. Chamberlain, Dr. and Mrs. H. H. Smith, Dr. and Mrs. A. F. Hoge, Dr. and Mrs. J. S. Southard, Dr. and Mrs. T. P. Foltz, Dr. and Mrs. Raymond Smith, Dr. and Mrs. W. F. Rose, Dr. and Mrs. Ralph Weddington, Dr. and Mrs. H. C. Dorsey, Dr. and Mrs. L. M. Henry, Dr. and Mrs. S. P. Stubbs, Dr. and Mrs. J. L. Kellum, Dr. and Mrs. W. F. Adams, Dr. Fred Krock, Dr. J. W. Amis, Dr. W. O. Arnold, Miss Sarah Weaver, Dr. W. T. Prite, Miss Mary Ellen Kolb.

Out-of-town guests were: Dr. C. H. Finney, St. Louis; Dr. and Mrs. B. L. Ware, Greenwood; Dr. and Mrs. Earle Hunt and Dr. and Mrs. G. R. Seigel, Clarksville; and Dr. and Mrs. S. P. McConnell, Booneville.

MRS. W. F. ROSE,

Publicity Chairman, Sebastian County
Medical Society Auxiliary.

BOOK REVIEWS

The Patient's Dilemma: By Hugh Cabot, M. D. Pp. 284. Price \$2.50. New York: Reynal and Hitchcock, 1940.

This book, as is to be expected, is highly controversial, the author assuming a almost prophetic role while condemning the medical profession for sins of omission as well as of commission. We hold no brief for the profession other than to state that perfection is not to be expected of it any more than of other human endeavors. We strongly doubt that Dr. Cabot's much-vaunted group practice which is advanced as the solution of adequate and proper medical care will ever attain any greater degree of perfection. On the credit side we feel that Dr. Cabot believes in good medical care and, further, that he has presented in his own manner the problems involved in the present distribution of medical care. With his solutions we must differ.

Organized Payments for Medical Services: By the Bureau of Medical Economics, American Medical Association. Pp. 185. Chicago: American Medical Association, 1939.

Every conceivable plan for the organized payment of medical services is apparently described in this book. This great number of plans is substantial testimony to the fact that an earnest desire is being made to supplement the private practice of medicine and to secure a solution to varying medical problems. Physicians interested in this phase of medical practice, and that should be every physician, should study this book.

Doctors in Shirt Sleeves: Edited by Sir Henry Bashford. Pp. 294. Price \$2.50. New York: Veritas Press, 1940.

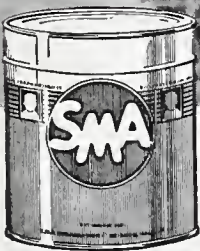
This volume is a selection from personal reminiscences and reflections as published in *The Lancet* for the past two years. They show the other side of medical men, their musings on patients, old age, biology, medical students, gardens, their reactions as only general practitioners



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may react, to the life about them. This is a most interesting anthology and all physicians will read it with pleasure.

Clinical Heart Disease. By Samuel A. Levine, M. D., F. A. C. P., Assistant Professor of Medicine, Harvard Medical School; Senior Associate in Medicine, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton Hospital; Physician, New England Baptist Hospital, Boston. Second Edition, Revised and Reset. 495 pages with 109 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$6.00.

In this second edition the author has brought up to date and enlarged upon what was even in the original a very practical discussion of cardiovascular diseases. It should find enthusiastic reception among general practitioners, as well as among those clinicians interested primarily in heart disease because of the personal approach the author has employed, modifying little if any the form which characterized the original text. While he does not fail to cover the laboratory aspect of diagnosis he emphasizes—and very justifiably so—the relatively greater importance of clinical signs and symptoms elicited at the bedside or in the clinic. Frequently throughout the text he recounts his own personal experiences concerning problems in diagnosis and treatment.

A very timely chapter on the relationship of trauma to heart disease has been added because of the growing interest in the medico legal aspect of circulatory disturbances. In the chapter on clinical electrocardiography the section dealing with the precordial leads has

been revised to conform with the new nomenclature recommended by the American Heart Association.

In your reviewer's estimation this second edition, like the first, will undoubtedly be most helpful to those who peruse its pages.

Chemotherapy and Serum Therapy of Pneumonia. By Frederick T. Lord, M. D., Elliott S. Robinson, M. D., Ph. D., Roderick Heffron, M. D. 174 pages. Cloth, \$1.00. New York: The Commonwealth Fund, 1940.

This manual replaces the widely used "Pneumonia and Serum Therapy" published in 1938 by the Commonwealth Fund. It brings up to date the material on serum therapy, presents in condensed form the more recent information concerning the use of sulfapyridine and includes a concise discussion of the technique of the combined chemotherapy and specific serum administration.

Included also is a discussion of the indications and contra-indications for these various methods of treatment, their relative merits, methods of use, precautions to be observed, and results obtained in series of cases sufficiently large to permit critical interpretation.

This excellent compendium on recent advances in therapy will undoubtedly prove to be most helpful to those of us who are confronted with the problem of the treatment of pneumonia in private practice, wherein we see relatively small numbers of cases, each presenting its own individual problem in diagnosis and management.



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CONVALESCENT SERUM IN THE PROPHYLAXIS AND TREATMENT OF COMMUNICABLE DISEASES*

S. GEORGE WOLFE, M. D.
Shreveport

Since 1896, when Weisbecker,¹ in Germany, reported on the use of measles convalescent serum in the treatment of that disease, the literature has been replete with isolated reports of more or less statistically significant series of cases in which human convalescent serum had been used in an effort at prophylaxis and treatment of communicable diseases. For the most part, these reports have been encouraging, but many workers were not convinced of the efficacy of serum because of the many variables necessarily present in the clinical experiments conducted. In the first place, it is extraordinarily difficult to carry out clinical experiments under conditions which simulate to any degree the accuracy of carefully controlled experiments with laboratory animals. In the present case, criteria are often necessarily based on opinion as to clinical improvement in a given case, but it is obvious that such improvement conceivably is conditioned by the age and size of the patient, the intensity and recency of exposure, physical or hygienic status at the time of exposure, the time interval elapsing after exposure and before the administration of serum, the amount and route of administration and the potency of the serum. Since these factors are apt to be dissimilar in one series of cases as compared with another, it is difficult to arrive at an unassailable conclusion as to the worth of this form of therapy. Until recently its relative unavailability has been an even more important reason why convalescent serum has not enjoyed a more widespread usage.

In 1924, Richardson collected sufficient measles serum to make it available for widespread distribution. In 1930, Martmer, working in the Detroit Department of Health, was able to

supply all the various serums then thought to be effective in the prophylaxis and treatment of communicable diseases. Thus, the first "Serum Center" came into being. At the present time there are eight serum centers prepared to supply physicians at large with potent, pooled, convalescent serum. This material is furnished for a fee with the expectation that the physician will provide the center with data as to the results obtained from the use of the serum.

The method employed in the preparation of serum is essentially the same in the various centers. Healthy individuals, free from syphilis, are bled four weeks to six months after defervescence; 250 to 500 c.c. of blood is drawn into a centrifuge flask and immediately chilled. It is allowed to remain on ice for 24 hours, after which time the clot is firmly retracted. The serum is pipetted off, centrifuged and again pipetted and returned to the ice box after merthiolate (1:10,000) or 1/2 per cent phenol has been added. When 20 to 30 such samples have accumulated, they are pooled, and after cultures fail to reveal contamination, the lot is divided into ampoules of 20 c.c. each. Two ampoules are selected at random for animal inoculations. If the animals show no evidence of ill effects, the lot is released for use.

Donors may be bled monthly until such time (6-12 months) as they are no longer considered convalescent. Pearl Kendrick and, more recently, McGuinness and Bradford, have carried this procedure a step further, in the case of whooping cough, by regularly administering authorized vaccine to the donors during the course of the bleeding, thus producing "hyperimmune" or "reinforced" convalescent serum.

In 1935, Mudd, Florsdorf and Stokes were able to prepare pooled serums in a powdered

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 15, 1940.

form by rapid evaporation in vacua over dry ice. They found this "lyophile" serum to be potent after one year's refrigeration. The unique characteristic of this powdered serum, however, is its ability to re-enter solution in one-fourth of its original volume. This is an asset when it is desirable to give large amounts intramuscularly. Lyophile serum is supplied by the Philadelphia Serum Exchange, Children's Hospital, Philadelphia.

Now that it is available, to what uses can we put convalescent serum; what are its advantages over other forms of specific therapy; and, what of the techniques of its administration?

An immediate advantage over antitoxin, e.g., is due to the fact that convalescent serum, being homologous serum, does not cause anaphylactic reactions or serum sickness. Moreover, convalescent serum probably contains all the antibodies called out in the human body in response to a specific disease, whereas most animal serums are purified to the extent that one antibody, usually antitoxin, is present to the practical exclusion of others. In the treatment of virus diseases, if given early before union of tissue cell and virus occurs, convalescent serum offers particular advantages, inasmuch as no other specific form of therapy is available. But let us pass to a consideration of this form of therapy as it applies to the more common communicable diseases.

MEASLES

As mentioned above, convalescent serum was first employed in 1896, in an effort at measles prevention. This work did not spread, however, and most investigators addressed themselves to the task of finding a means of creating active immunity to the disease. Thus far, such efforts have met with complete failure. Probably because of this, interest in convalescent serum and adult whole blood was awakened and these measures, particularly the latter, enjoyed more or less widespread usage in the prevention and modification of measles. However, since there is considerable variation in the amount of measles antibody present in adult whole blood, one would expect, as does occur, its frequent failure to prevent or modify the disease. Moreover, when adult blood is used, it is necessary to administer comparatively large amounts. At times this is a distinct disadvantage.

In 1933, McKhann demonstrated measles, diphtheria, poliomyelitis and certain other antibodies in the globulin fraction of human cold blood and placenta. By extraction and concen-

tration of this fraction, he was able to produce material, so-called immune globulin, which, when administered in the proper amounts and at the proper time, will prevent or modify measles in the large percentage of cases. Unfortunately, its use is followed by uncomfortable to moderately severe reactions in from 20 to 30 per cent of cases.

On the other hand, numerous confirmatory studies have established that serum obtained from persons recently recovered from measles, when given intramuscularly in doses of 4-5 c.c. to suitable, exposed persons during the first three to five days following exposure, results in a temporary immunity (10 days—2 weeks) in the recipient, preventing the development of measles from that exposure. If the injection is given later in the incubation period, but before the catarrhal symptoms appear, a modified form of the disease results. In this event, the incubation period is prolonged, Koplik's spots may be absent, patient is less toxic, the rash may be atypical and transitory, but permanent immunity usually results.

If pooled, convalescent serum is not available and that of a single donor is to be used, the dose given should be 7 c.c.; if adult serum is restored to, at least 30 c.c.; and if whole blood, at least 60 c.c.; although, as mentioned above, the use of the latter two procedures will often result in modification when protection is desired. It has been our practice to give convalescent serum when the aim is complete protection, and immune globulin when modification appears desirable, realizing that modified measles does not confer active immunity in all cases.

Until recently all workers were agreed that the treatment of measles with specific serums after the catarrhal symptoms had appeared was largely a hopeless task. In 1938, Kahn and co-workers, of New York, demonstrated that sharp modification resulted in 10 of 12 cases receiving 50 c.c. of serum intravenously, two or more days before the appearance of the rash. Doses of less than 50 c.c., or routes of administration other than the intravenous one, gave inconstant results. Even more recently, others have witnessed decided improvement when large doses of serum are given intravenously, even at the height of the rash.

Our own experience with the use of convalescent serum conforms with the above published results. We feel that children under five years of age, or those chronically or recently ill, should be protected in every case, or if symptoms

are present when first seen, they should be given active treatment in the form of large doses of serum intravenously. At this point it might be well to suggest that should one be desperately eager to modify or lighten a case of early measles for any reason and convalescent serum be not available, a transfusion of 150 c.c. of blood from a recently recovered case would probably accomplish the same results.

WHOOPING COUGH

The conflicting opinion regarding the value of convalescent serum in the treatment of whooping cough is well reflected by Shaw, who as recently at 1937, reported to the Academy of Pediatrics as follows: "Bradford conducted critical studies of a comparatively small group, using whole blood of adults who had whooping cough in childhood, as well as serum from recent convalescents. His series is too small for conclusion, but he presents a clinical opinion which summarizes his own experience and coincides with the majority of the most careful reports. He believes that convalescent serum, and probably the blood of adults who have had whooping cough in childhood, contains active principles capable of modifying the course of the disease, if applied early in the incubation period before the onset of the early catarrhal stage of infection."

Since then, Katsampes, McGuinness and Bradford have shown that humoral antibodies do not appear in the blood of a pertussis patient until the height of infection. Furthermore, these antibodies can be demonstrated regularly in controls immediately after the injection of convalescent serum. They conclude, on the basis of these observations, that there is theoretical justification, at least for the administration of serum to pertussis patients after the onset of catarrhal symptoms and, perhaps, even later. In the meantime, McGuinness modified Jundell's method of reinforcing convalescent serum which he preserved by the lyophile process. He, Bradford and others, have only recently reported their exceedingly encouraging results in the treatment of whooping cough during the catarrhal stage and, indeed, after the onset of cough.

McGuinness treated 100 cases of pertussis with hyperimmune human serum by the intramuscular route. Fifty-one of these children were under six months of age. In most instances, 20 c.c. of serum was given every other day until three doses were administered. In several instances, however, the total amount given was somewhat less than 60 c.c. and the interval between injections, of necessity, longer.

Employing rigid criteria for improvement, he classified the degree of recovery as (1) Excellent, 32 cases, (2) Good, 31 cases, (3) Moderate, 20 cases, (4) Questionable, 14 cases, (5) Death, 3 cases. It is significant that those cases falling under the headings of "Moderate" and "Questionable" comprised, for the most part, the older children, and those receiving smaller amounts of serum. The fatalities occurred within forty-eight hours of treatment and all three infants suffered from broncho-pneumonia. In view of the fact that sulfapyradine and sulfathiazol are highly effective in most cases of pneumonia complicating measles and pertussis, it is interesting to speculate as to whether the administration of one of those drugs might not have brought about a more favorable termination in these three infants.

McGuinness concludes that the best results were obtained in infants: In his series a fatality rate of slightly less than six per cent in infants under six months of age, whereas the expected rate is 25-30 per cent. Obviously, the amounts of serum given to infants were proportionately far larger than those amounts given to older children, and for this reason may have been more effective.

As stated above, the intramuscular route of administration was employed in these cases. One wonders whether the intravenous administration of serum might not have resulted in even more striking improvement.

In this connection, Thalheimer, working with rabbits, has shown that five minutes after an intravenous injection of serum, specific antibodies were present at maximum titer in exactly the dilution calculated on the basis of the amount of serum injected and the blood volume of the animal.* The titer of the antibodies studied, agglutinins and hemolysins, did not decrease in these normal animals until after 24 hours, diminishing slowly so that two weeks later a low titer was present.

When the same amount of serum was injected intramuscularly, it took 14-16 hours on the average for the maximum titer to appear in the blood, and its level then was only half that found five minutes after the intravenous injection of the same amount of serum. The titer began to diminish from this lower level 24 hours after the serum was injected. These experiments would indicate then that, speaking broadly, an amount of the serum given intravenously is more effective than twice that amount given intramuscularly. Our own experience, gained solely from the

clinical use of these serums, causes us to conclude that the absorptive phenomena demonstrated in the rabbit are also valid for the human.

The results obtained with hyperimmune serum in the prophylaxis of whooping cough are even more striking. McGuinness used 10-20 c.c. intramuscularly in 83 children exposed (44 intimately) with complete protection in 56, or 78.3 per cent. In 11 of the 18 cases developing whooping cough, the disease was markedly attenuated.

As in the other communicable diseases, this immunity is purely passive and should not be depended upon for longer than 10 days; and when failure to protect does occur, a prolonged incubation period, bizarre onset and atypical course can be expected.

SCARLET FEVER

Convalescent serum produces its most striking results in the prophylaxis and treatment of scarlet fever. Hoyne and co-workers, reporting in 1935, were able to protect 97 per cent of contacts by the intramuscular injection of 10 c.c. of serum to infants and 20 c.c. to older children during the first three days of exposure. When treatment was instituted after the onset of the disease, results were considered excellent in 81 per cent of the cases. The most notable and immediate influence of the serum was on the toxemia which, in most cases, is markedly diminished. There was also a prompt improvement in the anginal symptoms. The effect on the eruption was less evident unless the serum was given within the first 36 hours of the disease. Indeed, when 20-40 c.c. of serum, depending on age, is given intravenously, early, the disease is aborted in 12-18 hours in 65 per cent of the patients, the temperature becoming normal, toxemia disappearing, the rash either fading or disappearing and desperately ill patients being converted into convalescent ones during the course of a few hours' time. This crisis is of such a dramatic order that several times in our experience, the family or referring physician have questioned the diagnosis. We have since learned to advise the parents in advance of the startlingly beneficial results to be expected in most cases.

It is a well known fact that, at times, one encounters patients in contact with true scarlet fever who fall ill with streptococcic sinusitis or angina, or even septicemia, but who never develop a rash. Similarly, one occasionally sees patients who have not been exposed but who are ill with all the throat, tongue and toxic signs

of scarlet fever, who follow courses identical with that disease, with the exception of the rash, which is absent. These observations, plus the fact that ordinary beta-hemolytic streptococci and the streptococci of scarlet fever have many bacteriological and immunological properties in common, led Thalhimer, Levinson and others to the use of large doses of scarlet fever serum in fulminating cases of streptococcic sepsis. In many instances, these efforts have met with encouraging results. Although we have had no experience with the use of serum in this type of case, we feel there is a definite place for serum along with sulfanilamide in the treatment of severely toxic cases of streptococcic sepsis.

Before leaving this subject, it might be well to point out an additional use of serum, viz., in connection with the Schultz-Charlton blanching reaction produced with 1 c.c. of convalescent scarlet fever serum injected intracutaneously.

This procedure is extremely reliable in differentiating between a scarlet fever lesion and lesions from other causes. It is definitely more certain, and in a larger percentage of cases, than is the same test carried out with scarlet fever antitoxin. Again, there is the advantage of the human serum in avoiding reactions or sensitizations.

MUMPS

Most workers are in agreement that the results with mumps convalescent serum are surprisingly good. Thalhimer had an unusual opportunity to observe what amounted to a controlled experiment. Thirty-six boys, from 12 to 14 years old, at a boys' camp were exposed to 3 boys with mumps. Eighteen boys previously had had mumps and did not receive serum; of the other 18 who had no previous history of mumps, 16 received serum and 2 did not, because their parents refused permission; only the 2 boys who did not receive serum developed mumps. The amount injected intramuscularly was 20 c.c.

The reported observations with the use of serum in the treatment of mumps are few, but Thalhimer, Toomey and others believe it to be definitely helpful in the prevention of complications, in alleviating parotitis, and shortening the clinical course, and if orchitis or oophoritis already exists, it definitely results in improvement of those complications.

It would seem that mumps serum would find greatest usefulness in camps, institutions and the like, where it is of importance to quell epidemics of any kind and at all costs. However, in an

epidemic characterized by a high incidence of complications, we should not hesitate to use serum in the treatment of an early case, particularly if it be in an older child who, otherwise, would more than likely come down with an orchitis or oophoritis, as the case might be.

CHICKENPOX

Chickenpox is almost always a mild disease and hardly worth the effort of specific treatment. It is fortunate that this is so, for published results on the use of convalescent serum in its prophylaxis and treatment are quite conflicting and even paradoxical in that some treated cases have seemed to fare worse than untreated controls. The consensus of opinion, if there is a consensus, however, is that it is worthy of trial if given early and in large doses. It is conceivable that, rarely, one might encounter a patient who, for one reason or another, must be protected from any disease, however trivial. One would be justified, perhaps in giving that patient 100 c.c. of chickenpox convalescent serum intravenously without, however, being too disappointed if the patient contracted the disease, which proceeded to run its course as though the serum had never been administered.

POLIOMYELITIS

If there is disagreement as to the value of serum in chickenpox, this is as nothing, compared to the babble of tongues when one comes to the subject of serum in infantile paralysis. Opinions vary from that of Parke, whose oft quoted series of cases tended to show that serum administration was definitely detrimental, to that of Levinson, who gave repeated large doses intravenously to 200 consecutive cases without the development of paralysis in a single case. From those who say that virus and cell union occurs almost immediately in poliomyelitis and that all experience with virus infection shows that in such a state of affairs the virus is beyond the reach of humoral antibodies, therefore, the use of serum is illogical, to those whose clinical impression of improvement consequent to the giving of serum is so strong that they believe it indicated, regardless of the more scientific observations.

Without entering into this discussion, which is without the scope of this presentation, it can be said that the confusion is understandable. First, the disease itself is extremely variable from epidemic to epidemic and from patient to patient within an epidemic. It is well known that in any given epidemic only a minority of patients

will progress to paralysis; but even more confusing is the picture sometimes encountered of a patient who seems surely destined to widespread paralysis, only to halt in his progress, pass through a rapid convalescence to complete health without demonstrable muscle weakness.

Moreover, it is certain that serum varies tremendously in its titer and it is obvious that, granted its effectiveness, serums of unknown titer will produce conflicting results. In support of this is the work done by Jansen in Denmark. He showed that the donor with crippling evidence of the disease, formerly considered a very desirable donor, is no longer acceptable, because of the low antiviral content of his blood. Jansen further studied pooled serums from the different groups of convalescents, paralytic cases, non-paralytic cases and abortive ones. He found that these serums, when titrated according to the monkey protective method, gave startling results. Serum from paralytic cases gave only 1000-2000 protective doses per c.c.; non-paralytic cases contained approximately 80,000 units per c.c.; while serum from abortive cases contained 150,000 units per c.c. Quoting Jansen, "The abortive cases were those with only slight and transitory symptoms, which occurred in close relationship to unquestionable paralytic and non-paralytic cases of poliomyelitis in families or institutions."

It remains to be seen whether or not this work is corroborated or accepted in principle. If it is, and in the future serum of known titer is widely enough used, the answer to the question of efficacy of serum in poliomyelitis should be forthcoming. But until then, or such time as more specific therapy is available, you and I will use serum or, failing that, large, repeated transfusions from more than one convalescent donor. If serum is chosen, large doses, 100-200 c.c. intravenously daily would seem to offer most hope.

SUMMARY

In summary, it may be said that until fairly recently the unavailability of convalescent serum prevented its more widespread use. This serum furnishes a valuable method of preventing and treating the more serious contagious diseases. In certain instances, it may be the deciding factor in the life or death of a patient.

Because of its high antibody content, pooled serum should be used whenever possible. Donors should be bled as soon as practicable after recovery. In the case of whooping cough, serum of higher titer is obtained if the donors are receiving Sauer's vaccine at regular intervals. The

dose of serum in all cases should be decided with due regard to the time element, the age and size of the patient. In prophylaxis, the intramuscular route is the method of choice. It must be remembered that serum produces only a passive immunity which should not be depended upon longer than ten days. In treatment, it should always be given intramuscularly. Sensitization never results and reactions rarely occur. Typing is not necessary if pooled serums are used. The practice of giving an initial dose intravenously and subsequent doses intramuscularly is illogical on the basis of animal experiment and clinical results.

The value of convalescent serum in poliomyelitis is doubted by some, but we are of the belief that patient ill with the disease should receive repeated, large doses intravenously until more satisfactory methods of treatment are forthcoming.

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¹ Bibliography to be found in author's reprints.

MANAGEMENT OF NORMAL LABOR*

GILBERT L. KIMBALL, A. B., M. B., M. D.

DeQueen

In the management of normal labor the accoucheur is almost as useless as the husband. He does, however, have certain definite duties which he should perform, and which will be discussed in this paper.

Labor, in its obstetrical meaning, has been defined as the process by which the product of conception is expelled from the maternal organism by the birth canal. The product of conception consists of a foetus, the placenta and membranes, and the liquor amnii. The birth canal consists of the uterus, which is differentiated into an upper contracting portion, and a lower dilating portion, the vagina, the vulva, the pelvis which surrounds the vagina and the lower part of the uterus, and the pelvic floor, consisting of the various muscular and aponeurotic structures which surround the vagina and are incorporated in the perineum.

The diagnosis of labor is made by the presence of painful uterine contractions, increasing in frequency, duration and severity, the history of a show, and the presence of effacement, dilatation, and softening of the cervix. The most frequent cause of confusion is so called "false labor pains," and this can usually be discerned as such by observation of the patient for a time. As soon as labor has started the patient receives an enema, the vulva and perineum are shaved, and a shower or sponge bath is given. It has been shown in a carefully conducted series of cases, that unshaven women properly scrubbed have no higher morbidity than shaved ones. From the standpoint of delivery this is true, but it is much easier to maintain cleanliness in the puerperium in shaved women. The patient is now ready for the obstetrical examination. The extent of this examination will depend on whether or not the patient has had the proper prenatal care. Definite information as to the general physical condition of the patient should be at hand, and should include an examination of the heart, lungs, urinary system, blood pressure, size and shape of the pelvis, abnormalities of the bony structures of the body, the history of previous labors if any, and the duration of the present pregnancy. If the patient has been under observation this information will be at hand. The diagnostic methods of the obstetric examination are: abdominal palpation, vaginal

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PLEASE COMPLETE
AND MAIL
YOUR PREPAREDNESS
QUESTIONNAIRE

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* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

or rectal examination, and auscultation. Abdominal palpation determines the height of the fundus, ovoid, longitudinal or transverse, what foetal part is in the fundus, what foetal part is in the inlet, and the position of the foetal back.

The rectal or vaginal examination determines the degree of effacement and dilatation of the cervix, station of the head, and confirms the abdominal diagnosis of presentation and position, the condition of the bag of water, and the size of the head and the pelvis. Most normal labors may be conducted with the use of rectal examination alone. If the findings are obscure, or any abnormality exists, a vaginal examination may be necessary. Internal examinations should be limited to the smallest number required for the intelligent conduct of the case. The foetal heart tones should be auscultated at intervals of half an hour during the first stage if the bag of water is intact. After the rupture of the bag of water, the heart tones must be observed frequently enough so that the attendant knows at all times that the baby is not beginning to show signs of asphyxia. The rupture of the bag of water is an important event in any stage of labor, and more particularly in the first stage. When the baby is deprived of the protection of the amniotic fluid, uterine pressure may seriously interfere with the circulation in the cord or placenta. If the presenting part does not completely fill the inlet, the cord may prolapse into the pelvis when the bag ruptures. The heart tones should be carefully observed immediately after the waters rupture in every case. Normally the membranes rupture about the end of the first stage. The efficiency of the bag as a dilator is lost when the dilatation of the cervix is seven cm. and it is proper management to rupture the bag of waters artificially at this time, using of course, aseptic technique.

The administration of an analgesic or a drug producing amnesia is almost compulsory. The proper time of administration in the multipara is when there is about two to three cm. of dilatation and when the diagnosis of the onset of labor has definitely been made. In the primipara the time of administration is better made when there is three to four cm. of dilatation, because the first stage is longer in the primipara and later administration decreases the duration of the use of the drug. The drug used will depend to some extent on whether the delivery is at home or in the hospital, and to the choice of the individual physician.

The second stage of labor lasts from the time at which cervical dilatation is complete until the

expulsion of the foetus. In the primipara this may last from one to three hours, in the multipara from a few minutes to one hour. The onset of this stage is often indicated by the onset of bearing-down pains, and ordinarily this can be diagnosed by the peculiar cry or expulsive grunt of the patient. There may be a discharge of a small amount of blood. The patient voluntarily assumes a recumbent position before the end of the first stage. At the onset of the second stage if the labor is progressing rapidly, or if the patient is a multipara, final preparations for delivery are made. Ideally, the foetal heart tones are taken in the interval between pains. The preparation of the patient includes a cleansing of the external genitalia, thighs, and lower abdomen with soap and water, followed by bichloride or lysol solution, or mercurochrome, and the patient is draped with sterile linens. The physician puts on a cap, mouth piece, sterile gown, gloves, and anesthesia is provided. The patient is delivered on the back. This position permits frequent observation of heart tones, and a better aseptic technique. The protection of the perineum requires that the head shall be delivered slowly. Flexion is maintained until the occiput is well under the symphysis, then extension is secured to complete delivery. When the advancing head distends the vulva widely, the thumb and three fingers of one hand are so placed as to prevent too rapid descent and maintain flexion until the parietal bosses are out. The patient is then instructed not to bear down and the anesthesia is deepened. In the interval between pains, the head is permitted to deflex and allow the brow, nose, mouth, and chin, to pass over the perineum. It may be necessary to deflex the head by Ritgen's maneuver. The other hand helps to control the head. No sponge is used as it obscures the field and soils the perineum. As soon as the head is delivered the finger is passed to the neck of the child to ascertain whether it is encircled by the umbilical cord, if so, and it is loose enough, it is slipped over the head or the shoulders. If it is tightly applied to the neck it may be necessary to clamp it in two places and cut between the clamps. In the majority of cases the shoulders appear at the vulva just after external rotation takes place and are born without difficulty. If delay occurs, extraction may be necessary. The head is seized by placing one hand on each side, with the tips of the fingers below the zygomatic arches, and gentle upward traction is made until the posterior shoulder is delivered. Then by downward movement of the head the anterior shoulder is de-

livered. Too much force in this maneuver may over stretch the muscles in the head and neck, so if added force is needed the patient is asked to bear down, or Kristellar expression by an assistant will usually be sufficient. The routine use of pituitary extract at this time is considered by some authorities as being superfluous, as they have found no decrease in either frequency or severity of blood loss during the third stage of labor, its chief use being in the control of postpartum hemorrhage. Certainly its use before the end of the second stage is almost invariably contraindicated.

Immediately after the child is born it is held up by the heels to straighten the trachea and the pharynx is freed of mucous. The gloved little finger serves well to sweep the mucous out of the mouth and pharynx. If respiration does not start at once, mild stimulation may be applied. But the child should never be slapped on the sacrum or back, and should not be roughly handled. Normally the cord should not be clamped and cut until it has ceased to pulsate or until respiration has begun. After ligation of the cord, one per cent freshly made nitrate of silver solution is instilled into each eye. The lids should be dried by patting with a bit of sterile gauze after the silver solution is instilled, and not by wiping, as wiping may implant infection from the skin. The child is then wrapped in a blanket or flannel and put in a safe place until the third stage of labor is completed.

The third stage of labor extends from birth of the baby until the delivery of the placenta and membranes, and completion of any repairs necessary. This stage consists of two parts, the separation of the placenta from the uterine wall and the expulsion of the placenta and membranes from the vagina. The signs of placental separation are advancement of the cord, rising of the uterus in the abdomen, ordinarily to the right, and hemorrhage. The mechanism of placental extrusion from the uterus may occur in one of two ways. In the Shultz method, in which the central portion descends first, the organ becomes inverted upon itself in such a manner that it presents by its fetal surface, the inverted membranes following afterwards. In this mechanism the margins of the placenta are separated last and there is no escape of blood until the extrusion of the placenta. If the extrusion occurs by the Duncan method the placenta folds upon itself like a cylinder, its lower margin presents and the membranes are usually inverted. With this method there is slight but

continuous hemorrhage from the birth of the child until the placenta is delivered. The preferable method of placental expulsion is spontaneous, however, early expression, Crede expression, and manual removal may be used. In the absence of signs of hemorrhage, no attempt should be made to express the placenta for at least thirty-five minutes. But voluntary attempt on the part of the patient may be permitted. If the signs of separation are present before this time, the hand is placed upon the abdominal wall at about the middle, or grasp the recti muscles with both hands to take slack out of the belly wall, after the method of Bair, and the patient told to "bear down to deliver the after birth." If this fails early expression is the method used. No squeezing effort is made, but the uterus is simply used as a plunger to push the placenta out of the vagina. If this fails Crede expression is justifiable. This should not be attempted until at least thirty-five minutes have passed or other methods have failed, or where bleeding makes it necessary to empty the uterus at once. The uterus must be contracted in the mid-line, and the bladder empty when the Crede expression is used. Manual removal is a serious operation and should be avoided if possible. Indications for its use are hemorrhage, placenta retained for more than two hours, with an actively contracting uterus, or some other important complication on the part of the mother. Needless to say gowns, gloves, and linens should be changed before the operation is performed.

Summary—

The role of the medical attendant in the management of a normal labor is:

- 1—To conduct it under conditions as near aseptic as possible, without any undue interference.
- 2—To make proper choice of anesthetic and supervise its administration.
- 3—To administer proper care to the new born baby, being especially diligent in the care of the eyes and cord.
- 4—To give proper instruction for the care of the mother during the puerperium.
- 5—By observing the technique given in this paper, material decrease in maternal and fetal mortality and morbidity will be accomplished.
- 6—If ever in doubt the obstetrician should remember that there are more "errors of commission than of omission," in the practice of obstetrics.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

BRONCHOSCOPY is a relatively new means of investigation in the diagnosis of tuberculosis. It is especially valuable for discovering tuberculosis of the tracheo-bronchial tree, a condition which, though described over a century ago, is still treated too casually. Two clinicians, associated with a sanatorium where bronchoscopy is a routine procedure point out its value and report their experiences. Abstracts of their article follow.

BRONCHOSCOPY IN TUBERCULOSIS

The symptoms of tracheobronchial tuberculosis are wheezing or asthmatoïd attacks, paroxysmal attacks of intractable coughing with production of variable amounts of thick tenacious sputum at different intervals, dyspnea out of proportion to vital capacity with inspiratory stridor, cyanosis, constant clearing of the throat, persistently positive sputum in the absence of other evidence of pulmonary tuberculosis and intermittent atelectasis. It is apparent, in view of the experience of many and the recent extensive literature, that these cases should be bronchoscoped before any major surgical procedure for diagnostic reasons, as well as for therapeutic relief. It is also true that bronchoscopy should only be considered as a supplemental part of the complete examination of the patient. It also should be stressed that bronchoscopy should only be done by trained hands. A thorough knowledge of the anatomy of the structures involved is essential. It should be unnecessary to emphasize again that gentleness is of extreme importance, and that psychic as well as physical trauma of the patient must be avoided.

Authors' Experiences

After describing the bronchoscopic appearance of lesions, treatment procedures and other considerations discussed by various writers, the authors offer their own experiences. For the past two years all patients admitted to the Monterey County Sanatorium have been routinely studied by bronchoscopy, unless definitely contraindicated. Criteria were rigid and the findings of one observer were checked by the other. In a series of 53 cases definite tuberculous tracheo-bronchitis was found in 37%. Nearly all of the lesions were early mucosal and submucosal and

most showed definite visible tubercle formation. The majority were on the posterolateral and posteromedial walls of the main bronchi on the side of the pulmonary lesion. In only 3 of 20 definite cases were there symptoms. All cases have been treated by local applications of 30% silver nitrate, and all but one case have shown improvement on repeated examination and treatment, with apparent definite healing in 6. Healing has been interpreted by a flattened and normal appearing mucous membrane at the site of the previous lesion. In one other case a recurrence of the tracheobronchial ulceration occurred three months after there was apparently definite healing. Several cases with negative findings have been bronchoscoped, subsequent to collapse procedures, for check-up on persistently positive sputum and no bronchial lesion was found.

There were no complications attributable to bronchoscopy and no apparent ill effects in over 100 examinations. Patients accept bronchoscopy as a matter of routine. Carefully performed bronchoscopy is a relatively simple procedure which carries practically no risk, and yields a considerable amount of valuable information.

Summary and Conclusions

1. Tuberculosis tracheobronchitis has an important bearing on the prognosis and treatment of pulmonary tuberculosis.
2. Advanced and progressive ulcerative or stenotic lesions are serious complications.
3. Little is known of the evolution of early lesions and this is extremely important if they become progressive.
4. Early lesions occur without the classical symptoms of obstructive lesions.

5. Bronchoscopy of the tuberculous, unless definitely contraindicated, is simple and practically harmless, when performed carefully and gently by trained workers, and complications are rare.

6. Bronchoscopy is a routine procedure in many institutions before certain major surgical procedures and is becoming more so.

7. It is suggested that more bronchoscopic examinations be done on patients in sanatoria, not only to enrich our knowledge of tracheobronchial tuberculosis, but also with the more important view of a more rational and better treatment of the patient.

8. There is no accepted method of treatment of tracheobronchial lesions, but 30% silver nitrate locally applied seems to have some value, particularly in assisting in the healing of early lesions.

Routine Bronchoscopy in Tuberculosis by John C. Sharp and C. B. Gorham, *Amer. Review of Tuber.*, Vol. XLI, No. 6, June, 1940.

Bronchoscopy is not contraindicated except in cases of (1) acute laryngeal tuberculosis; (2) recent extensive hemorrhage; (3) far advanced tuberculosis with toxemia and cachexia. Even these contraindications may be considered only relative in isolated cases. Bronchoscopy in the tuberculous is now an accepted procedure by many phthisiologists and bronchoscopists.

The indications for bronchoscopy have been listed (1) as a diagnostic procedure for differential diagnosis; (2) as a diagnostic study in proved cases of tuberculosis with certain signs and symptoms; (3) to assist in carrying out endobronchial procedures, such as the instillation of opaque media or for therapeutic purposes.

Tracheobronchial Tuberculosis

There are apparently two methods of the development of tuberculous tracheobronchial lesions; by continuity through direct extension from neighboring structures as through the lymphatics, and by the implantation of bacillary sputum on the mucosa. Several types of lesions have been observed, namely, (1) the diffuse and nodular mucosal or submucosal lesion, (2) ulcerative lesions, (3) fibrostenotic lesions, and various combinations of these.

A wide variation in incidence has been reported by various writers. One group of workers found tuberculous tracheobronchial lesions in 41% of autopsies of tuberculous cases and another worker reports only 4.4% tuberculous lesions in the major bronchi.

The development of the bronchoscope has stimulated the study of tuberculous tracheobronchitis in the living, not only from the diagnostic viewpoint, but also in relationship to pul-

monary disease, as well as with regard to the therapy of the local lesion.

PHYSICIANS NEEDED FOR ARMY SERVICE

The physician, like every other American, has become actively interested in our national security and stands ready to contribute his services as required for military preparedness.

The immediate problem in this connection is one that concerns the War Department, and primarily the young physician. The War Department must procure sufficient additional personnel from the medical profession to augment the medical services of the Regular Army as the various increases are made in the strength of the Regular Army, as authorized by Congress to meet the partial emergency. The young physician is especially concerned because it is usually advantageous, and is often more convenient for him to serve with the Army.

Present plans of the War Department are designed to make service attractive and instructive for the young physician. If the physician holds a Medical Corps Reserve commission he can be ordered to active duty if he so requests. If he does not hold a commission, but is under 35 years of age and is a comparatively recent graduate of an accredited school, he may secure an appointment in the Medical Corps Reserve for the purpose of obtaining extended active duty for a period of one year or longer. Duty is given at General Hospitals, Station Hospitals, and with Tactical Units, and embraces all fields of general and specialized medicine and surgery. Excellent post-graduate training is obtainable in connection with Aviation Medicine. After serving 6 months of active duty in the continental United States, a Reserve officer may request duty in Hawaii, Panama, or other United States territories and possessions. The initial period for duty is for one year and yearly extensions are obtainable thereafter until the international situation becomes more clarified and our domestic military program becomes stabilized.

Pay is according to rank, and, including subsistence and quarters allowances for an officer with dependents, amounts to an annual sum of \$3,905 for a Captain and \$3,152 for a First Lieutenant; or, without dependents, to an annual sum of \$3,450 for a Captain and \$2,696 for a First Lieutenant. In addition, reimbursement is made for travel to duty station and return.

Further information may be obtained by writing to The Surgeon General U. S. Army, Washington, D. C.

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A. M. A. SEEKS IMMEDIATE RETURN OF PREPAREDNESS QUESTIONNAIRE

Committee on Medical Preparedness Asks For Cooperation of Every Physician in Promptly Sending in the Blank

"Cooperation and preparedness at this time constitute the duty of every American citizen who enjoys his citizenship and wishes to preserve the American democracy," an announcement in the Medical Preparedness Section of The Journal of the American Medical Association for July 13 declares in a plea for the immediate filling in and returning to the Committee on Medical Preparedness of the Association of a questionnaire being sent to every licensed physician in the United States and in all its territories.

"This questionnaire," the announcement points out, "is being sent at the request of the Surgeon Generals of the United States Army, Navy and Public Health Service as part of the plan for preparedness of the medical profession to enable our country to meet any emergency which may arise. The questionnaire was developed with the advice and assistance of the members of the

Committee on Medical Preparedness and of the Surgeon Generals. Just as soon as these questionnaires are received in the headquarters office of the American Medical Association the information supplied will be transferred to cards in a punch card system, so that it will be possible by the use of the usual machines to make a selection of physicians capable of serving in various military, naval, industrial or civil capacity.

"The physician who receives this questionnaire should take the necessary time and give the necessary thought to supply a complete and absolutely correct reply. It is the desire of the authorities, should an emergency arise, to place every individual capable of rendering aid in the position in which he can be of the utmost service, and also naturally where his training and his experience most deftly qualify him. It will be observed that opportunity is offered to state appointments in hospitals, together with the nature of the appointment, membership in special medical organizations, together with the nature of such membership, and whether or not the physician possesses the certificate of one of the examining boards in the medical specialties. There is also opportunity to provide complete information concerning the civil status of the physician concerned, whether or not he practices alone or in association with other physicians, whether or not he is married and has children, and whether or not he has any physical incapacity which might prevent him from doing certain types of service.

"It is hoped that every physician will cooperate with the Committee on Medical Preparedness and with the United States government by filling out this blank and returning it at the earliest possible moment. Obviously, as physicians are needed, an attempt will be made to supply them through this mechanism. If, however, conscription should become necessary, it is important to realize that physicians who have failed to cooperate will have to take the chance of being assigned to any kind of service which may offer, and perhaps with far less possibility of rendering the quality of aid they are capable of rendering."

MEDICAL PREPAREDNESS

Shortly there will be made available to the county medical societies of the United States, the coordinated plans of the Federal government and the Preparedness Committee of the American Medical Association, looking forward to the possibility of armed conflict necessitating the addition of many medical men to the United

States armed forces. These plans will consider the most efficient ways in which the soldier and civilian population may receive medical attention. It is contemplated that physicians will be called to service through committees formed in the county medical societies on a quota basis. Special effort will be made to avoid taking needed physicians from the smaller communities. Quite likely many physicians wishing to volunteer for active service will be denied that privilege because a more urgent need will exist for them to remain in their own communities. Obviously, the greatest amount of cooperation from all physicians will be required if the plans are to work with greatest efficiency. The medical profession must expect that sacrifice will be the rule. We have no reason to feel but that all physicians will cheerfully and earnestly work together in these times.



"Osler at Old Blockley" a painting in oil by Dean Cornwell, was unveiled at the dedication of the Osler Memorial Building on the grounds of the Philadelphia General Hospital this past June and was later exhibited at the American Medical Association convention in New York.

The painting depicts one of Osler's outstanding contributions to medicine, namely, bringing medical students to the bedside of the patient for clinical study. In the painting Osler is shown at the side of an elderly patient on the hospital grounds. Surrounding Osler and the patient are internes who have stopped with him as they were on their way to the autopsy house to observe one of his famous post mortems. This autopsy house, now the only Osler Memorial Building in the United States, is shown in the background. This memorial was made possible by a grant from John Wyeth & Brother.

"Osler at Old Blockley" is the second painting in the series "Pioneers of American Medicine" sponsored by John Wyeth & Brother as part of a project to highlight the contributions of Americans to the advancement of medicine. "Beaumont and St. Martin" was the first painting in the series.

Colored reproductions of "Osler at Old Blockley," suitable for framing may be obtained free by addressing requests to The Journal of the Arkansas Medical Society, 610 First National Building, Fort Smith, Arkansas.

PROCEEDINGS OF SOCIETIES

Washington and Benton County Medical Societies held their annual picnic at Lake Weddington, July 11th.

The Independence County Medical Society met in dinner session at Batesville, July 8th. The following program was presented: "Endometriosis," J. J. Monfort; "Trachoma," C. G. Hinkle, and "Classification of Heart Disease," F. Q. Wyatt.

J. J. Monfort, Secretary.

PERSONALS AND NEWS ITEMS

The Journal incorrectly reported that J. B. Elders had moved from Walnut Ridge to Harrisburg in the July issue. Dr. Elders is still located at Walnut Ridge.

The following appointments have been made in the Medical Corps, Arkansas National Guard: Stanley M. Gates, Monticello, promoted to major; Paul W. Hoover and Thomas J. Raney, Little Rock, appointed first lieutenants.

W. A. Ellis, Jr., has been elected a director of the Helena Rotary club.

Dr. and Mrs. D. W. Goldstein, Fort Smith, recently attended the graduation of their daughter, Gloria, at Sullins Academy, Bristol, Virginia.

MARRIED: On June 20th, Milton C. John, Jr., and Miss Meo Hoffman, at Stuttgart.

The following have reported to the Morrilton training center of the State Board of Health: Hollis Buckalew, Albert Thompson, E. M. Nixon, Ben R. Russell, W. B. Prothro, Raymond E. Smallwood, C. F. Peters, William W. Johnson, Paul Brewer, Neal Compton and Gardner H. Landers.

Harry Hayes has been elected president of the Pulaski Heights Lions Club, Little Rock.

H. T. Smith, McGehee, and E. E. Barlow, Dermott, were speakers at the dedication of the Dermott Municipal Hospital, June 30th.

At a ceremony presided over by J. D. Riley, the new buildings of the State Sanatorium were formally dedicated July 4th. Speakers were Governor Bailey and Dr. W. A. Doppler, National Tuberculosis Association.

J. J. Monfort, Batesville, attended the recent Kiwanis International convention in Minneapolis.

Noel Copp, Calico Rock, attended the Republican National convention at Philadelphia in June.

J. W. Butts and Geo. R. Storms have been elected surgeons of the Helena post of the American Legion.

C. G. Leverett has been elected junior deacon of the Eudora Masonic lodge.

K. W. Cosgrove has been elected a director of the Little Rock Boy's Club.

Guy Hodges has been elected surgeon of the Rogers post of the American Legion.

E. Baker has been elected surgeon of the American Legion post at Dermott.

A. B. Robertson has been elected a director of the Rison Lions Club.

Announcement has been made that two positions as assistant residents in surgery are open at the University Hospital, Little Rock. Applicants should have finished at least one year of regular internship. Board, room, laundry and a small salary are included. Those interested should write Dr. S. P. Cromer, University Hospital, Little Rock, Arkansas.

Ellery C. Gay and K. W. Cosgrove, Little Rock, were on duty with the C. M. T. C. camp during July as medical reserve officers.

Dr. and Mrs. J. B. Reaves, Little Rock, spent a July vacation in Fort Worth.

J. M. Matthews has returned to practice at Morrilton after an absence of several months.

G. R. Siegel, Clarksville, and Berry L. Moore, El Dorado, attended the Lions International Convention in Havana during July.

The Fenwick Sanitarium is celebrating its fiftieth anniversary of continuous operation for the care of Nervous, Mild Mental and Drug and Liquor patients. It was founded by Doctor Frank Fenwick Young at Abbeville, Louisiana, in 1890 and was moved to Covington, Louisiana, in 1912. This institution is registered by the American Medical Association, a member of the American Hospital Association, National Association of Private Psychiatric Hospitals and Louisiana State Hospital Association.

J. L. Hope has moved from Warren to Lebanon, Missouri.

An abstract of the article on resuscitation by Dewell Gann, Jr., originally appearing in The Journal for May, 1940, appears in Modern Medicine for July, 1940.

Dr. and Mrs. Miles F. Kelly, Sheridan, spent a July vacation on the Pacific coast and in Canada.

Dr. and Mrs. H. Fay H. Jones, Little Rock, spent a July vacation in Panama City, Florida.

Hollis H. Buckalew has been assigned as director of the Garland County health unit.

R. B. Robins, Camden, Governor-Elect, District 7-B, Arkansas Lions Clubs, installed the new officers of Pulaski Heights Lions Club, Little Rock, July 8th.

BORN—On July 12th, a son, to Dr. and Mrs. W. M. Woods, Huntington.

W. A. Grimmett has been elected surgeon of the Blytheville post of the American Legion.

Dr. and Mrs. R. B. Robins, Camden, spent a July vacation in Havana, where Dr. Robins was in attendance at the Lions International convention.

Roy I. Millard, formerly with St. Mary's Hospital, has opened his office for practice in Russellville.

O. J. T. Johnston has been elected surgeon of the Batesville post of the American Legion.

K. T. Mosley has returned to duty as director of the Miller County Health Unit at Texarkana after completion of his study in public health at Harvard University.

Jack Ellis has been elected president of the Lions Club at Hot Springs National Park.

Guy Shrigley, Jr., has opened offices for practice in Clarksville.

MARRIED—On June 7th, Paul Z. Browne, Hot Springs National Park, and Miss Marie Louton, Glenwood.

E. J. Horner has been elected surgeon of the Jonesboro post of the American Legion.

Dr. and Mrs. W. F. Adams, Fort Smith, spent a recent vacation on Lake Hamilton.

A. C. Shipp, Little Rock, was the principal speaker at the dedication of the new buildings at the McRae Sanatorium, Alexander, recently.

Recent Little Rock vacationists in Panama City, Florida, were Dr. and Mrs. R. L. Calcote, Dr. and Mrs. Alan Cazort, and Dr. and Mrs. Paul Mahoney.

C. H. Finney, formerly of Saint Louis, has joined the Cooper Clinic at Fort Smith.

Hugh Mobley, formerly of Wilson, has been appointed health officer for White County and is now located at Searcy.

OBITUARY

ANDREW R. HOWELL, age 76, North Little Rock, died June 19th. Born in Texas, the family later moved to Pope county. Dr. Howell graduated from Jefferson Medical College in 1887. In addition to his membership in the Pulaski County Medical Society and the Arkansas Medical Society, to which he was elected to honorary membership in 1939, he was a member of the Masonic bodies and Scimitar Shrine and the First Christian Church. Surviving relatives are two daughters and three brothers.

JOHN THOMPSON ALTMAN, age 57, died of heart disease at his home in Jonesboro, July 17th. A graduate of the Vanderbilt University School of Medicine in 1908, he first practiced in Milan, Tennessee. His principal interest in medicine was obstetrics and for more than 20 years he had served as chief of the general staff of Saint Bernard's Hospital. He had been division surgeon for the Frisco and Cotton Belt railroads for many years and was a past-president of the Jonesboro Rotary Club. In addition to his membership in the Craighead-Poinsett County Medical Society, of which he was a past-president, he was a fellow of the American College of Surgeons. Surviving relatives are his wife and a daughter.

CHARLES R. TEETER, age 65, of Russellville died in a Little Rock hospital, July 13th. Born and reared in Pottsville, he graduated from the University of Arkansas School of Medicine in 1907 and had practiced in Pottsville since that date. More recently he had been associated with his son, B. R. Teeter, in practice at Russellville. For a number of years he had served as a member of the Pottsville School Board. Surviving relatives are his wife, two sons, and four daughters.

JACOB S. THOMPSON, age 83, died at his home in Stephens, July 10th. A graduate of the University of Louisville School of Medicine in 1882, he had practiced in Ouachita county since 1880. A former president of the Ouachita County Medical Society, he was the first of three generations to practice medicine, his son, S. A. Thompson, and his grandson, Sam Thompson, both being physicians. During his life he had served as President of the Stephens School Board, President of the Bank of Stephens and as Chairman of the Board of Stewards of the Methodist Church. Surviving him are his son, S. A. Thompson, of Camden, and three daughters.

RANDOM THOUGHTS OF THE SECRETARY

June 28th. In telephonic conference with Chairman Robins and Treasurer Calcote over Society finances, these three conferees being well-suited indeed to decisions on financial matters. Quite pleased, however, with the telephone conference plan of action, it affording opportunity for questions, answers and a thorough discussion of any problem at a minimum inconvenience.

June 30th. On this afternoon we strike out for Devil's Den State Park via the untrodden highway, partaking of self-cooked hot dogs and other fare suitable to the occasion. Thence away to Lake Weddington where, with the youngster, we spend nearly two hours in the water and on the sand, the whole day one of delightful rest and relaxation and to home quite late for a real night's sleep.

July 1st. The Journal appears, carrying this time, a new high in typographical errors, wherein this column refers to Asheville as the "Land of the Shy." No casual visitor can agree with this appellation and we add a belated correction that this should have been "The Land of the Sky."

July 2nd. The Cooper Clinic guinea pigs get much publicity in today's paper. The reporter overlooked a bigger feature story on guinea pigs.

July 4th. Did the Fourth ever mean more than it does today? America with its freedom, its liberties, its opportunities, takes on a deeper significance within the hearts of all of us, as we must realize that the coming of the world of tomorrow may see all we hold dear in this country destroyed. Now is the time for us to take a realistic view of the changes occurring in this world. Now is the time for us to seriously consider and work for the continuance of our system of democracy come what may. We feel the idea is all too prevalent that when the going is hard and uphill that the proper action is to sit down and wait for a lift or to ask Washington to make an appropriation. This idea needs to be scrapped. Our life will be immeasurably bettered for its passage into oblivion. For ourselves we are convinced that there is need for more faith in prayer than in telegrams to politicians and we express the devout hope that Americans will show as much interest in church as in any double-feature movie.

July 10th. Readily disposing of dignity the staff and personnel of Cooper Clinic picnics at Lake Fort Smith. Among the reminiscences is the theft of Goldstein's shirt, sporadic efforts at acrobatics on the trapeze by a roentgenologist who should know better, and Pat Siegel from Clarksville way without a ticket.

July 13th. Gathering with the Chamberlains for dinner, we receive the most continuous heckling, exceeding that of any previous occasion in a life made abundant in razzing remarks. Our posture, our pronunciation, our proclivities in sports, after dinner tales, haberdashery, and any other trait, characteristic or manifestation of our frail spirit, are all made light of by a gang of wolves. At that, Frances' dinner was enjoyable and we hope the carping critics sought to analyze themselves the morning after.

July 14th. The delightful spring days which were with us during the week give way to the accustomed July weather of this section, to which we react in as tranquil manner as possible, taking life in the easiest possible manner all day long. With a surprise to ourselves, we snap out of lethargy in the late afternoon to busily water the lawn and feed the youngster's menagerie, the chores we are in the forced habit of doing each late Sunday afternoon.

July 15th. At staff meeting tonight Eberle appears in shoes, abandoning the semi-barefoot habit of the past weeks and all are gratified that the foot pains are subsiding. Merle Woods, proud papa, comes with a big smile, but overlooks adherence to the fine old custom of passing cigars.

July 16th. With all our insistence that medicine be practiced on a scientific and accurate basis, there remains much for us to learn. Having treated at our place for the past two weeks, a crusty skin lesion, involving the hairy parts and associated with marked itching, without success, we call on a friend for suggestions. He promptly asks for a slide that he may determine the cause. The patient, the youngster's pony; the professional friend, the veterinary. So do we learn the lesson of scientific medicine! We suppose there are those who will call it "smart politics" but we doubt that the majority of the party and the voters will appreciate this long silence of the third term. The ambiguity of the statement as finally presented does not augur for the entire harmony of the party convention.

July 17th. This night, in rare diversion, we listen to the radio account of the convention in Chicago, intently interested in Nevada's passing and firm refusal to do more until voting time when it goes 4-2 Farley. Interesting, too, was the poll of the Massachusetts delegation, it being quite obvious to listeners that some political wounds remain to be healed in that state. At that, we surmise that many a Democrat feels that Jim Farley was thrown a curve ball. That the delegate body is not unanimous for a third term, Harry Hopkins and the leased wire from Washington to the contrary, is shown by the disinclination of certain delegations, Texas, West Virginia, Alaska and the Canal Zone, to get on the band wagon, though the nomination was already won as they cast their respective votes. Contemplative of this peculiar fractional delegate vote of the Democrats, it is possible that 1/15 of a vote is enough, at that. So, cutting off the final noise, we assume that the Democrats have arranged to meet another "emergency," a goodly number of which have likewise been met since 1933 by the doctors of these United States.

July 19th. With the head-man's blessing, Wallace gets the second place on the ticket and we can not imagine that this meets with Carl Bailey's whole-hearted approval, third-term supporter that he must be.

July 20th. After all, the issue still remains—Do you want medicine by a governmental bureau? Do you want a continuance of the policies of these past years? Do you believe that a steady trend toward dictatorship by governmental bureau is the best for America? As for "stand-pat" Republicans and "yaller-dog" Democrats, bear in mind that, this year, everyone will be a "mug-wump," voting a split ticket, whether or no.

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WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

The Woman's Auxiliary to the Miller County Medical Society concluded its activities for the year at its June meeting with Mrs. Decker Smith, at the Coffee Cup.

The various yearly committee reports showed that the accomplishments of the Auxiliary had been particularly outstanding under the leadership of Mrs. Ralph Cross, who presided and had charge of the program "Checking Up."

She presented each member with a cleverly arranged "report card" reminiscent of school days showing the members attendance and work done by the individual and showing whether or not she had passed.

Mrs. L. J. Kosminsky and Mrs. Harry Murry, delegates to the Arkansas Medical Society Auxiliary meeting in Fort Smith, gave interesting high lights of the meeting. It was reported that 1,700 subscriptions to Hygeia were sent from the state of Arkansas.

Mrs. William Hibbitts, who is president-elect of the Texas Auxiliary, and Mrs. Allen Collom, delegates to the Texas convention, told that 615 women were registered for the session in Dallas and that records showed 68 organized counties. Announcement was made by the president that this group had been awarded \$30 given by Dr. Preston Hunt, president of the Texas Medical Society, for having the greatest percentage of members reading the Texas Medical Journal.

Mrs. N. B. Daniel told of one of the projects of the Arkansas Auxiliary for the coming year which is to secure from every Auxiliary in the state one dollar, this amount to be contributed to the libraries of the different tubercular sanatoriums over the state.

In presenting the gavel to the incoming president, Mrs. J. E. Tyson, Mrs. Cross expressed her appreciation of the splendid cooperation given her by the members and wished for Mrs. Tyson the same pleasant association.

Mrs. Tyson announced her committees and introduced the following officers who will work with her: Dr. Francis Spinka, first vice-president; Mrs. J. F. Williams, second vice-president; Mrs. R. R. Kirkpatrick, third vice-president; Mrs. A. G. Lee, fourth vice-president; Mrs. N. B. Daniel, secretary; Mrs. P. D. Priest, corresponding secretary; Mrs. John T. Porter, treasurer; Mrs. C. E. Kitchens, publicity secretary; Mrs. P. H. Phillips, parliamentarian.

At the conclusion of the meeting a delicious salad plate was served the following: Mrs. E. L. Beck, Mrs. H. E. Longino, Mrs. William Hibbitts, Mrs. T. F. Kittrell, Mrs. Harry Murry, Mrs. L. H. Lanier, Mrs. H. H. Puckett, Mrs. Allen Collom, Mrs. N. B. Daniel, Mrs. R. R. Kirkpatrick, Mrs. L. J. Kosminsky, Mrs. P. H. Phillips, Mrs. J. T. Porter, Mrs. Charles Kelly, Mrs. Ralph Cross, Mrs. C. E. Kitchens, Mrs. A. G. Lee, Mrs. J. E. Tyson, Mrs. A. Rossitto, and Mrs. Decker Smith.

The Ouachita County Medical Society and Auxiliary were entertained in Stephens, Arkansas, by Dr. and Mrs. J. P. Clements on June 6th. The next meeting will be in September. A four-course dinner was served at beautifully appointed tables decorated with red radiance roses. Many lovely garden flowers were placed about the rooms. Miss Norma Jean Curry played several piano selections. Following the address by the state president, Dr. Smith, the Auxiliary members adjourned to the

living room for a short business session. The meeting was presided over by the president, Mrs. Powell, and plans were discussed for the coming year. Mrs. Smith, of McGehee, and Mrs. Cooksey, of Magnolia, were guests.

CONVENTION HIGHLIGHTS

The Woman's Auxiliary to the American Medical Association met in New York City, June 9-14, at the Pennsylvania Hotel with Mrs. Rollo K. Packard, of Chicago, Illinois, presiding.

Many were the entertainment features of this convention, due to the efforts of our splendid convention chairman, Mrs. Carlton F. Potter, of Syracuse, New York, and her numerous committees.

On Sunday afternoon from four to six, the members of the National Board were invited to a tea at Sherry's, honoring our President, Mrs. Rollo K. Packard. This was a most delightful occasion, and your president enjoyed every minute of it. The entertainment feature was a vocal program by an "honest to goodness" doctor, Dr. Charles Dwight Reid. He was very clever, not only with his choice of selections but the dramatic manner in which he sang. Corsages were presented by Elizabeth Arden with unique bottles of perfume on stick pins hidden in the center of each corsage.

The Board meeting the following morning was very fine. Due to the untiring efforts of Mrs. Packard, many things have been accomplished in every phase of the work. The officers and chairmen of the national Auxiliary deserve much credit, and also every State President along with the officers, chairmen and members of the respective state auxiliaries in the outstanding achievements.

The National Board members enjoyed another beautiful entertainment Monday evening at the Waldorf Astoria Empire room in honor of the Board of Directors of the Woman's Auxiliary to the American Medical Association. The Woman's Auxiliary to the Medical Society of the State of New York presented Claire Alcee, lyric soprano, in a recital after a very delicious dinner.

The first general session of the Woman's Auxiliary to the American Medical Association started Tuesday morning and throughout Tuesday and Wednesday, our national Auxiliary heard reports of officers and chairmen of the national Auxiliary and various states. All the reports were fine and showed much work.

Your President enjoyed visiting with national officers, and other state presidents exchanging ideas and gaining new ones, and forming new friendships. It was very inspirational and much information was gathered.

A call board meeting was held Tuesday afternoon and the national officers and committee chairmen answered questions about their work and discussed problems with the state presidents.

Both the Tuesday and Wednesday luncheons were beautiful affairs. The Tuesday luncheon honored the Past Presidents, and the Wednesday luncheon was in honor of Mrs. Packard. Tickets were given to each one present at the Tuesday luncheon to a showing at Elizabeth Arden's, with each one receiving a stunning box filled with Elizabeth Arden beauty preparations.

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*"Treatment of Acute Anterior Urethritis with Silver Picrate," Knight and Shelanski, AMERICAN JOURNAL OF SYPHILIS, GONORRHEA AND VENEREAL DISEASES, Vol. 23, No. 2, pages 201-206, March, 1939.

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Everyone enjoyed this feature of the program. Elizabeth Arden furnished corsages with the perfume at both of these luncheons. The programs were varied. Dr. Rock Sleyster and Dr. Morris Fishbein talked at the Tuesday luncheon, and Wednesday Dr. Nathan Van Etten and Dr. Charles Hay made the addresses followed by a program of music; Salvatore Trivizo delighted us with his music.

The Exhibits were splendid and the record for the number of states exhibiting was almost 100%.

Tuesday evening the big open meeting for both the doctors and their wives was held and many fine addresses were heard. Wednesday evening was left open for the doctors and their families to do or see what they chose. Many lovely things were provided in the way of entertainment every day; grand tours of the city, garden tours, airplane rides, tours of the World's Fair and many others.

The Post Convention Board meeting was held Thursday morning with our new President, Mrs. W. E. Holcombe of Charleston, West Virginia, presiding. We heard the new officers and committee chairmen outline their plans and we are sure these officers are going to give us the same high ideals and fine programs to carry forward as we have had in the past; and we as members of the Auxiliary to the Arkansas Medical Society will also strive to make progress along every one of these lines, not only helping our doctors, but our state to a realization of what our doctors are doing and what our people need in the way of Health!

Yes, it was a marvelous convention. A review of a splendid year's work, thanks again to Mrs. Packard and to every member of the Woman's Auxiliary to the American Medical Association.

Your President and your Secretary are endeavoring to compile some material for the State officers and County Presidents, and this will be ready soon for mailing. Won't each one of you, whether you hold State or County offices, or not resolve to study our Auxiliary program to assist in making this year's work a real achievement, to show growth in every phase of our work? In the words of that dear little "convention chairman," Mrs. Carlton F. Potter, I am saying "Please."

Sincerely yours,

(Mrs. Alfred) Mary Louise Hathcock.
President of the Woman's Auxiliary to the
Arkansas Medical Society.

BOOK REVIEWS

The Era Key to the U. S. Pharmacopoeia XI and National Formulary VI: Edited by Lyman D. Fonda, Professor of Pharmacy, Brooklyn College of Pharmacy. Fifth edition. Pp. 320. Price \$1.00. Newark, New Jersey: The Haynes and George Company, 1940.

This small volume contains all the essential data about preparations in the U. S. P., the N. F. and the N. N. R. For 46 years this book has served as a handy guide to pharmacists and physicians, making such information readily available.

A Textbook of Pathology: By W. G. MacCallum, Professor of Pathology and Bacteriology, The Johns Hopkins University, Baltimore. Seventh Edition, Thoroughly Revised. 1,302 pages with 697 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$10.00.

This standard teaching text has held firm place for nearly a quarter of a century. As a text for students it correlates well clinical and didactic pathology. Of particular value is the emphasis placed upon the necropsy and its value in teaching.

Neoplastic Diseases: By James Ewing, A.M., M.D., Sc.D., LL.D. Professor of Oncology at Cornell University Medical College, New York City; Consulting Pathologist, Memorial Hospital. Fourth Edition, Revised and Enlarged. 1,160 pages with 581 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$14.00.

Acknowledged the work of a master, the 4th edition of this classic work has been completely revised, eliminating much old material and adding newer knowledge of many tumors. Excellent illustrations are a feature. This is a complete, authoritative text.

Medicine and the State: By Sir Arthur Newsholme, K. C. B., M. D., F. R. C. P. Pp. 295. Baltimore: Williams and Wilkins, 1932.

In this exhaustive treatise the author summarizes his findings from a study of medical care, private, governmental, voluntary, hospital and public health, in the European countries. Application of such systems to the United States is discussed only in general terms, but the author does attempt to point out certain evolutionary trends and to indicate errors from which this country may profit. The major premise, the all-important value of the health of each individual, is developed in its several relations to the private practitioner, the government, voluntary bodies, insurance schemes and hospitals. The difficulties which attend dependence for financial benefits by medical certification are emphasized. This is a volume well-worth serious study by all physicians.

Minor Surgery. By Frederick Christopher, S. B., M. D., F. A. C. S. Associate Professor of Surgery at the Northwestern University Medical School, Chicago; Chief Surgeon at the Evanston (Ill.) Hospital. With a Foreword by Allen B. Kanavel, M. D., F. A. C. S. Fourth Edition, Reset. 990 pages with 639 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$10.00.

Dr. Christopher's fourth edition is an excellent treatise on diagnosis and treatment of diseases, which come under the usual heading of minor surgery. He portrays the fact that minor surgery is not necessarily "minor," very nicely. He also warns of the possibility of major surgery resulting from improper, or negligent so-called minor surgery. Views of other respected men are given freely and very aptly throughout the book in conjunction with his own ideas, particularly on any subject which might be controversial. As the work is primarily on therapy, it embraces about everything one encounters in the office or out-patient department, and all details of technique. Even the minor ones are meticulously given which so often are left out of a book of this type. In addition to the chapters under the usual headings, as to injuries and diseases, he has two at the end which add a great deal to the book. One on "Minor Surgical Technique," that gives technical details from the simplest to the most complicated of office procedures, and one on "The Surgical Intern," which contains a great deal of information that we all need to know more about. The volume is filled with most instructive illustrations that add a lot to its effectiveness.

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No. 4

THE TUBERCULIN PATCH TEST:

A Comparative Study of the Vollmer Patch Test and the Mantoux in 200 Cases*

RALPH E. WEDDINGTON, M. D., and
WILLIAM O. ARNOLD, M. D.
Fort Smith

In 1937 Vollmer and Goldberger (1) reported an improved tuberculin patch test which compared very favorably with the Mantoux as a means of detecting tuberculin sensitivity. Patch testing had been used before (2) with indifferent results. Since their report (3) however, several others (4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14) have reported similar experience.

Although the amount of work done to the present time has probably not fixed this method as a standard for routine tuberculin testing, a review of the literature noted above finds very favorable accord in the consideration that the Vollmer Patch Test (Lederle) is equally as sensitive as the first strength (1:1000) Mantoux for routine examination and that it possesses the advantages of not being painful, eliminates the dangers of slough and infection, can be performed easily without the aid of assistants, does not frighten children and does not produce either focal or general reactions.

An excellent review by Hughes (15) evaluates the work done to the present time.

Method

The method that has been employed in our cases is that recommended by Vollmer and Goldberger (16). The tuberculin "patch" consists of a piece of adhesive 2.5 cm. by 7.5 cm. on which are placed at 2 cm. intervals three squares of filter paper each 1 cm. square. The squares near each end of the adhesive have been saturated with undiluted old tuberculin produced from synthetic media (after the

method of Seibert) (17) while the center square has been saturated with glycerin broth to serve as a control. Old tuberculin has been selected for the testing medium because this substance has been shown to exhibit greater sensitivity, possibly due to its water-absorbing capacity, than have similar squares soaked with purified protein derivative (18). The adhesive surface of the patch is covered with a protective strip of crinoline and sealed in single units in a crimped cellophane wrapper to avoid exposure to soiling and moisture.

The actual performance of the test is extremely simple and painless. An area of skin 4 cm. wide by 10 cm. long over the sternum is cleansed with acetone or ether to remove the skin oils. (Both Hughes (15) and Pearse (19) recommend that the skin surface between the shoulder blades be used to lessen the likelihood in the younger age groups, particularly, of removing the patch prematurely.) The crinoline layer is removed and the adhesive is applied firmly and smoothly to the prepared surface. The mother, or whoever is responsible for the child, is then instructed **not to permit the tape to become wet**. This is particularly important because the wet or loosened patch may result in a defective test. During the course of the next 48 hours the insensible perspiration liquifies the dried tuberculin in the filter paper squares and the resultant solution, held in contact with the skin by the tape, produces the reaction. At the end of the 48-hour period the tape is removed and **discarded**. The tested area is left unprotected by dressings for another 48 hours, when the test is read.

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 15, 1940.

The Reaction

A positive reaction consists in an indurated, reddened area with follicular lichenoid elevations which roughly conform to the size and square shape of the filter paper. It may be slightly larger, irregular in outline and produce some vesiculation and itching but we did not observe any necrosis or lymphangitis attending the reaction. We reported the reactions as strongly positive, moderately positive, weakly positive and doubtful. All doubtful reactions were regarded as negative in this study. No reactions were observed in the central control area in any of our cases.

Personal Experience With the Patch Test

We chose to employ two separate groups of 100 children each, all of whom are of grade school age (6-12 years).

The first group consisted of 100 known tuberculin reactors who had been previously tested by means of the Mantoux (1:1000) approximately 1 year prior to patch testing. We hoped to demonstrate with this group the relative sensitivity of the two tests and to show the degree of correlation between them. Approximately fifty per cent of this group was selected from colored children in order to show the type of reaction with varying amounts of skin pigment and to determine whether any difficulty would be encountered in reading the reaction in the dark skin.

The second group of one hundred children was unselected and of unknown tuberculin sensitivity in order to determine the value of the method as a "screening" test for unknown, unsuspected childhood tuberculosis. All of these children were white and some had received Mantoux tests prior to our examination, but we were not familiar with the results.

Figure 1 gives a tabulation of our results with the two groups. There was a surprisingly close correlation between the Mantoux (1:1000) and the Vollmer patch. In the group of 100 known reactors there was a 100% agreement between the two tests. The patch was, if anything, more strongly positive in this group as a whole than the previously reported Mantoux.

On the other hand, in the screening test we observed an 11% greater efficiency in the patch over the standard 1:1000 intradermal test. Of this group 32% proved to be positive to the Mantoux and 43% to the patch. As will be observed (Figure 2) this compares very favorably with previous reports recorded in the literature with the single exception of the work

done by Peck and Wegman (20) whose results we are unable to explain at the present time unless they were using the weaker patch or were inclined to their stated impression, through defective technique.

We did not observe in either group any clinical evidence that could be interpreted as a focal or a general reaction to the patch test, although 4% of our unknown reactors showed some local necrosis as a result of the Mantoux testing.

Comment

We have deliberately limited this study to a comparison of the 1:1000 old tuberculin intradermally with the patch test. It is readily admitted that a higher percentage of reactors may be obtained by using greater concentrations of O.T. or its equivalent but the routine measures adopted by most practitioners and public health units rarely employ concentrations greater than P.P.D. No. 2 or its equivalent and it is with these groups that the burden of case-finding in early tuberculosis rests. Consequently, we were chiefly interested in determining the correlation between the two tests as they are employed, and in studying the efficacy of the patch test as a "screening" measure in the grade school age groups.

At the present time we would hesitate to recommend absolute dependence upon the patch test alone, as has been suggested (21), until an opportunity to examine larger groups under controlled conditions has presented itself. In this small series we have been satisfied that there is a very close correlation between the Mantoux (1:1000) and the Vollmer Patch Test and that as a screening method the patch offers a very efficient and simple method of determining tuberculin sensitivity in the grade school groups. It has the further advantages of not being painful, requires no sterilized equipment, may safely be applied by an assistant or nurse, is less time consuming, eliminates the danger of injury to the skin and does not produce any focal or general reactions.

We therefore suggest that public health units and institutions devoted to the care of the tuberculous adopt this method for large-scale testing in order to further evaluate its worth. We feel confident that the patch, combined with the stronger concentrations of old tuberculin or its equivalent will meet the most rigid requirements. If so, this method will fill the long-felt need for a simple, reliable, painless means of testing for tuberculin sensitivity.

FIGURE NUMBER 1

Results of Comparative Studies Between the Vollmer Tuberculin Patch Test and the Mantoux Test

		Cases	Pos. Mantoux	Pos. Patch	Neg. Mantoux	Neg. Patch
Known Reactors						
To Mantoux						
0.1	0.T	100	100	100	0	0
Unknown Reactors		100	32	43	68	57

FIGURE NUMBER 2

Author	Cases	Positive Patch	Mantoux	Mantoux Conc.	
Vollmer					
Mt. Sinai Hosp.	666	42	41	0.1	0.T
Sea View Hosp.	540	529	530	P.P.D.	I-II
				.001-10	0.T
Taylor	744	218	206	.1	0.T
Hart	536	97	100	.01-1	0.T
Wiener-Neustadt	257	54	58	0.1	0.T
Kerr-Winograd	1,455	213	227	P.P.D.	I-II
Leonidoff	200	193	187	P.P.D.	I-II
Court	210	129	131	0.1	0.T
Hughes	100	89	78	P.P.D.	I-II
Of 624 Reactors					
Pearce, et al.	712	87% correlation between Patch & 0.T		P.P.D.	I-II
	100				
Weddington and	Known	100	100	0.1	0.T
	100				
Arnold	Unknown	43	32		
Total	5,816	1,696	1,690		

Summary and Conclusions

1. Two hundred cases examined by the Vollmer patch and Mantoux (1:1000) methods have been reported.
2. One hundred cases of known tuberculin sensitivity (selected) to the 1:1000 O.T. intra-dermally correlated 100% with the patch test.
3. Of 100 unknown reactors 11% more positive reactions were detected by the patch test than by means of the 1:1000 Mantoux.
4. In a large series of cases by various examiners the patch test has been shown to be slightly more efficient than the Mantoux (1:1000) or its equivalent.
5. The Vollmer Patch Test is simple to perform, requires no sterilization of instruments, does not excite or frighten children, can be given by a nurse or assistant without danger, produces no injury or depigmentation of skin and does not produce focal or general reactions.
6. This test should be used by public health units and institutions for the care of the tuberculous in order to obtain further evaluation.

7. Because of its simplicity and painlessness it will probably replace the O.T. 1:1000 and be used in combination with the stronger dilutions of O.T. or its equivalent in the determination of tuberculin reactors.
8. It (patch test) should be, for the reasons above noted, an excellent test for case finding studies done on large groups of both pre-school and school age children.

We wish to make grateful acknowledgment to Lederle and Company for the patch testing material used in this study and to Miss Maryella Clayton, R. N., for her assistance in our work.

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Second year medical student urgently needs financial assistance. Elderly physicians contemplating retirement with no prospective successor, or any individual, institution or community with foresight sufficient to contract for medical services three years hence, please write Earl Parsons, Jr., State Hospital, Little Rock, Arkansas.

RECIPROCAL RELATIONS OF OPHTHALMOLOGIST AND GENERAL PRACTITIONER*

MEYER WIENER, M. D.
Saint Louis

It was suggested, in my talk to you today, that I bring out some of the things in ophthalmology which would be of benefit to and interest the man in general practice, possibly including eye-grounds, differential diagnosis of glaucoma and iritis, the handling of foreign bodies and things in general which the family doctor must meet in his everyday experience. Naturally, this is such a broad subject that one can barely scratch the surface.

I, therefore, deem it wise to go over a few things in detail rather than treat the whole subject in a most superficial way.

Uppermost in my mind, and one rarely stressed, is the relationship of the specialist in ophthalmology to the general practitioner; what one expects of the other when a case comes for consultation or work-up. I am not referring to the exceptional ones, but to the average in each category.

It has not been unusual for me to receive from the medical man, when asked for a work-up on an eye case of obscure origin, a report that his heart, lungs and urine are normal. Nothing more. I will admit that such an inadequate report is often the fault of the ophthalmologist in not consulting with his medical man and telling him just what he has found and what he would like to have clarified.

It is the duty of the ophthalmologist to send the clinician his findings with his suspicions with a suggestion of the various possibilities as to cause, so that when the internist begins to examine the case he at least has a clue as to how he shall proceed and what to look for. Usually, what is wanted is not the prevailing report which includes urinalysis, blood pressure, blood Wasserman, etc., but a careful search for source of possible focal infection, sensitivity to food or external irritation or a test for tuberculosis.

When the suspected tuberculous lesion is intraocular, the internist must be warned of the possibility of grave danger to the eye should the patient be unusually sensitive to tuberculin, and cautioned that the initial dose must not be more than one ten-thousandth of a milligram. I have seen a terrific reaction from a smaller dose than this, seriously endangering the eye.

I am not giving my fellow oculists a clean bill, by any means. Too often their reports are sorely lacking in essential details. When, for example, a case is sent to us for a work-up to help clear the situation, the internist must not and cannot be satisfied with a report merely that nothing abnormal was found. I have often seen such reports. Again, I have seen reports stating that choked disc was present in each eye, measuring so many diopters in one eye and so many in the other. Nothing more. The central vision, fields of vision, both central and peripheral, should be included in every case suspected of having increased intra-cranial pressure, even though they may seem to be perfectly normal; a detailed description of the fundus of each eye, describing media, disc, its size, color, and outline; systematic search for hemorrhages and exudates, type, size, depth, etc., and location. This is most important in view of subsequent, later examinations, as it is impossible to recall these details from memory. Lastly, the size, color, and contour of the vessels should be noted.

A report is not complete without comment, interpretation and recommendations. I believe that all of these things could be brought about by a better understanding of what one wants from the other, and the determination on the part of both parties not to be satisfied with, or to accept, inadequate reports, one from the other.

There are times when it becomes necessary for the man in general practice to have a basic knowledge of diseases and abnormalities of the eye. Unless he is acquainted with what constitutes the normal, it is not likely that he will be able to recognize what is abnormal.

The pupil, for example, varies in size, not only under different conditions of light, but changes with accommodation and with the emotions; with age and with sleep. The new-born infant's pupil is small and responds very slightly to light. In youth it is very large and responds very quickly as well as extensively, whereas in old age it reverts back to type and becomes very small again. This has a most important aspect which I shall mention.

Our professor of medicine used to tell the student that if he wished to see the action of stimulation of the sympathetic to tickle his girl under the chin and watch her pupil dilate. During sleep, the pupil is very small, just as in the first stage of anaesthesia; the eyes are rotated up and are divergent; and the conjunctival

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vessels are engorged (vaso-motor change); while during feigned sleep, the pupils are large, the eyes parallel and the conjunctival vessels normally bleached. These are just a few examples of how tissues and organs may vary under different, non-pathological conditions.

The iris varies in amount of pigmentation of various races and in blond and brunettes of the same race. It may change under certain pathological conditions, but can always be differentiated from the physiological change. The width of the palpebral fissures and the shape of the inner canthus and slant of the fissure may vary considerably in different races. What may be normal for one race may not be for another. However, the two must be approximately alike. I say approximately in a guarded manner, for the two sides of a person's face are never exactly alike. The artist knows this when he paints or photographs your likeness, always trying to select the more flattering side.

Even the size of the eye varies with individuals. The eye at birth measures about 17.3 mm. in diameter and is quite hyperopic. It rapidly elongates until it finally becomes about spherical, or so-called, emmetropic. Sometimes it forgets to stop elongating and then we have a myopic eye. It now seems to be generally admitted that the greatest factor in producing myopia is heredity. Myopes have larger eyes than hyperopes, as a rule, and seem to be more predisposed to detachment of the retina; while hyperopes, with smaller corneae, are supposed to be more apt to get glaucoma.

Before taking up the subject of what the man in general practice of medicine is able to take care of in the way of ophthalmology, let us discuss the systematic routine method of examination to which he should subject that patient, before deciding that it is a case for him to handle. You can easily realize that unless he is aware of the possible pitfalls into which he is liable to stumble, he cannot possibly be able to differentiate the type of case he may safely treat.

To begin with, he must have a good light. The general appearance, gait, expression, color of the skin; all may have a bearing on the eye condition. Even the state of health of the scalp is of consequence.

One first looks at the width of the palpebral fissures and assures himself that there is no weakness of the lid muscles. The external muscular movements are then tested. The sac is now expressed and it is essential that it be ex-

pressed properly. Then comes the most important thing of all: the feeling of the intra-ocular tension. If this were done as a routine thing by medical men, and I do not exclude ophthalmologists, the number of glaucoma cases resulting in blindness could be considerably reduced. If one does this as a routine procedure, even though he feels certain that the tension is normal, he will soon become familiar with the feel of the normal give of the eye and will more easily recognize even a faint increase in tension.

The examination of the lids includes not only the skin of the lids, but the lashes, their number, contour, roots, and even color. Then comes the conjunctival surface of the lids. Those engaged in school and public health work must know, in addition, how to expose the retro-tarsal fold.

The bulbar conjunctiva is next inspected, and lastly, the cornea. The conjunctiva can tell us a lot if we observe the color, extent and location and depth of the injection. For example; a bright red color greater in the periphery than near the cornea, means inflammation of the conjunctival tissue alone. A general pericorneal injection always means inflammation of the iris, or iris and cornea. A localized injection next to the cornea as a rule, indicates a localized involvement of the cornea or iris or both. If the localized redness happens to be toward the inner canthus, be sure to look for a lash or a short hair in the punctum. The location of the pericorneal redness, in other words, gives us a clue as to what part of the cornea we must search in order to find the lesion, which may be either an ulcer of the cornea or a foreign body. Hemorrhages in the conjunctiva of an otherwise healthy appearing child almost surely indicates whooping cough.

I need not tell you that the eye lesions of measles and of scarlet fever are among the very earliest to appear. I assume that you have been taught that patients afflicted with measles should be shielded from the light; at least, that was formerly an axiom. Some 30 odd years ago I had another thought, and got permission at the Salvation Army Rescue Home to flood the room with light during a measles epidemic, and also permit the children to use their eyes. There was not one serious eye complication, whereas there had been many previously. Gradually, this same treatment has been instituted at the Bethesda and St. Louis Children's Hospitals. It is now almost universal in St. Louis. In addition, we use very thin, cold, moist compresses over the closed lids, and permit the children to read and look at picture books and play games.

There is no reason why you should not remove foreign bodies from under the lids and even when embedded in the cornea, under ordinary circumstances. Be sure that everything is clean. When digging out a foreign body, do not try to transfix it, because if an iron scale or emery, it will break into small bits. Dig it out from the side, as though you were lifting out a stove lid; be sure to remove all of the emery rust as well as the metal or emery. When finished, dust in some xeroform powder; it is impalpable, antiseptic, non-irritating, and clings to the abraded surface for a long time. I do not think it is a wise thing to put on a bandage or pad; one-half per cent optochin solution instilled every two or three hours will keep it clean and prevent infection. Besides, after the burning stops, it has a slight anaesthetic effect.

When a patient appears immediately after a lye or lime burn, or acid burn, the first aid should be to get rid of the irritating substance as quickly as possible. If it happens to be a child, put your hand over his mouth and nose and hold his eyes under the bath tub faucet, turned on full force. This, in my opinion, is the very best first aid treatment. Similar, modified technic should be applied to the adult. If the burn is superficial, cold compresses are indicated; if deep, hot or warm.

Acute conjunctivitis will generally respond to cold compresses, and is usually self-limited, even when not treated. I am not in favor of a darkened room for any inflammatory eye condition. This is usually considered heresy by most ophthalmologists. Light is a great healer. The tears contain a natural enzyme which is strongly anti-bactericidal. If you dilute these too much with drops or the use of eye cups, the favorable effect is weakened. Besides, the blinking both bathes and cleanses; and, in addition, stimulates the lachrymal glands to further secretion. That is one reason I do not like bandages and dressings. If one wishes to use drops which will do no harm, use the optochin. Be sure to tell the patient beforehand that the drops burn severely for about a minute and then have a soothing effect. The solution must be fresh.

Most men, even oculists, prescribe yellow oxide of mercury ointment for marginal blepharitis. It is really about the worst thing you could give, as it is insoluble in about everything and is quite irritating. If one wishes to prescribe mercury, use the ammoniated mercury ointment, 2%, with equal parts of lanolin and vaseline as a base. Or, in cases where the lashes are

infected with crab lice, better still, use mercurial ointment, U. S. P.

In cases of blepharo-conjunctivitis due to the Morax-Axenfeld bacillus, we have a specific in zinc. One can usually recognize this infection clinically by a crack in the skin at the outer canthus. Besides, the infection is always chronic. It is most important that the ointment be used properly to be effective. The bacillus is a saprophite and lives on dead epithelial cells. Hence, if one does not get rid of the lid crusts first, the ointment will not penetrate and will fail to reach the bacteria. The crusts are soaked first with warm, moist, cotton pledges and then gently brushed off, the lid margin dried and the ointment gently rubbed into the roots of the lashes. This rule holds good in using any kind of ointment for all cases of blepharitis. Another thing to be born in mind in treating marginal blepharitis is the fact that, in the presence of dandruff of the scalp, it will usually have to be relieved before a permanent cure of the blepharitis is effected.

Hordeoli, or styes, should be punctured with a quick stab of a very sharp knife, followed by the application of hot, wet compresses. If the styes are recurrent, they are generally brought under control by giving the patient 30 drops of dilute sulphuric acid, U. S. P., in a half glass of water three times a day with meals. It must be taken through a straw or glass tube so as not to put the teeth on edge. Incidentally, this is an excellent treatment for boils.

Chalazion or Meibomian cyst, should have a crucial incision on the conjunctival side, followed by thorough curretting with a small, toothed curette. If one then trims off the corners of the triangles with a small cuticle scissors, the opening will drain without the formation of granulation tissue filling up the opening; further treatment or dressing is unnecessary.

The lid can be completely anaesthetized by instilling a drop of one-half per cent pontocaine and then ballooning out the retrotarsal fold with 2 per cent procaine, to which has been added a drop or two of epinephrin.

Some of you, who are doing public health work, or school work, are called on to pass upon a case suspected of being trachoma. Naturally, when a trained ophthalmologist is available, he should pass final judgment. Briefly, one can differentiate between follicular conjunctivitis and trachoma as follows: Both may be either chronic or acute. In trachoma, the follicles are more numerous in the upper retrotarsal fold than

in the lower; in follicular conjunctivitis, they are more numerous in the lower; in trachoma, the cornea always manifests evidence of pannus; in follicular catarrh, none; in trachoma, the continuity of the blood vessels passing from the sulcus to the lid margin is broken, some passing under the follicles; in follicular catarrh, the continuity is unbroken. You will always find a history of trachoma in the family of a suspected true case. In follicular catarrh, none. Besides, in the latter, one nearly always finds associated with it, adenoids.

In order to expose the upper retrotarsal fold, one can roll the lid back over an ordinary lid retractor, or, if one everts the lid and presses the globe back toward the socket with the two fingers against the lower lid, the fold will present itself. Pulling down the lower lid and directing the patient to look up, exposes the lower sulcus.

In this age of automobiles, every physician comes across a certain number of cases of injury to the eyes and eye lids. Unfortunately, eye cuts, especially across the cornea, are not easily recognized. A fresh cut, even through the entire thickness of the cornea, may be difficult to recognize, even by oblique illumination. I would urge every physician who comes across such cases to instill a drop of fluorescein 2 per cent, or other aniline dye, in any case where windshield glass has been broken, even though the patient does not complain of his eye at the time.

All of you know that after shock, one feels very little or no pain and one can often repair wounds immediately after an accident without anaesthetic with no pain to the patient. If there is a cut or scratch of the cornea, the fluorescein will stain it yellowish green, so that it cannot be mistaken. Fluorescein is also very useful in determining the depth and extent of an ulcer of the cornea or a burn of the cornea. Sometimes, when the patient lives at a distance where it is not practical for him to see the ophthalmologist as often as he feels he should be seen, the family physician treats him between times and gauges the progress of the ulcer through staining.

In this progressive age, all doctors are taught the use of the ophthalmoscope as an aid to diagnosis, as well as to prognosis. There should be a systematic routine method of ophthalmoscopic examination as well as in the external examination of the eye. One first observes the condition of the pupils. After dilating with

euphthalmine, one sits at a distance of about a foot, throws the light into the pupil and observes whether the media are clear. This is indicated by a red reflex; if obstructions in the red field are observed, it means opacities of the cornea, lens or vitreous. One can determine whether it is the cornea or lens by throwing the light into the eye from the side, holding the light real close to the eye. This, incidentally, is a good way to find a foreign body or corneal ulcer.

The next step is to throw the light in the patient's eye with the observer's eye as close as possible, without touching the patient's eye. If he now directs his gaze slightly to the nasal side of the patient's eye he will soon see the disc. There are so many variations of the normal disc that it would take me more than the entire allotted time I have to describe them. However, if one acquaints himself with the usual ones, he will probably not go far wrong. The size, color, shape and outline of the disc should be observed and recorded. Also the surface, excavation, and immediate surroundings.

The central, or macular, area cannot be satisfactorily explored without a dilated pupil. This is especially true in old people, whose pupils are small and whose lenses are beginning to cloud. We now begin a systematic search for hemorrhages and exudates. Since these are found where one would naturally expect to find them, along the vessels, we naturally start to search for them along the four main branches of the central artery and vein. We begin at the disc and take in turn, first the superior nasal, superior temporal, inferior temporal, and inferior nasal fields, following them to the extreme periphery. In this way, it is hard to miss anything. Last, we describe the size, color and contour of the vessels and their reflex. This is especially important in circulatory and renal disease.

In arterio-sclerosis, the vessels of the retina, being terminal, and the retina being developed from the forebrain, one would expect their condition to be a reflection of what he would find in the cerebral vessels. This surmise is correct. One of the first things we observe in retinal arterio-sclerosis is a change in the calibre of the vessels. Following a small vessel, we see it alternately become smaller and larger. Small, flame like hemorrhages appear. These are superficial. The tiny, round, deep ones, appear later. As the arteries become harder, the veins are compressed at the crossing. The vein will always cross at right angles and then resume its regular course. The small hemorrhages or exu-

dates are usually first found in the region of the disc. Later, they may be scattered anywhere. The central light streak is increased early.

Medical men practicing in outlying districts who, for obvious reasons, must take care of cases of iritis, often inquire how they can protect themselves from mistaking glaucoma. Sometimes it is very difficult. The case may start out as a simple case of iritis and develop glaucoma. My answer is for them always to be on the lookout for glaucoma, even when it starts out as an unquestioned, uncomplicated case of iritis. In iritis, the pupil must be kept dilated. Not that atropine has any curative effect on iritis, but that it prevents adhesions of the iris to the anterior surface of the lens.

In treating a case of iritis, the tension must be constantly watched. Always compare the give, or feel, of the one eye with the other, just as you would compare the two limbs in treating an affection of the arm or leg. In iritis the anterior chamber is generally of normal depth, whereas in glaucoma the iris is pushed up against the cornea, making the chamber shallow. In iritis, the more severe the inflammation, the more difficult to dilate the pupil. In glaucoma, the pupil dilates widely without a mydriatic. Then again, the pain in glaucoma is usually much more severe than in iritis, and the vision will most likely be more impaired. If in doubt, or if assured that the tension is up, send the case to an oculist immediately. These are most difficult cases even for the well-trained ophthalmologist to handle.

I am also often asked the question: what is the indication for atropine? and, when is it safe to stop using it? The indication for atropine is pericorneal injection (provided the tension is normal) for it always means inflammation of the iris. When the pericorneal redness has disappeared there is no further use for the atropine.

Occasionally a patient consults his family physician, especially in the country, and is told that he has cataract, that it is not ripe, as he can still see to get around, and that he must wait until it is "covered" for it to be ready for operation. Often he is right; the patient has uncomplicated cataract and his advice is sound. On the other hand, the patient may have glaucoma simplex, with or without cataract, and waiting until the cataract gets "ripe," or, until the patient can no longer see, may mean permanent blindness for him. This is the type of case

where the patient can be helped if the case is caught early and treated for his glaucoma, while waiting means eternal darkness.

In uncomplicated cataract in an old person, the pupil is small. In simple glaucoma, the pupil is large, regardless of age. This, to my mind, is the most important, single factor in the early diagnosis of glaucoma in advanced years and such a case should always be at least under suspicion. In glaucoma the anterior chamber is shallow; in cataract, it is usually normal. In glaucoma, the eye will feel hard to the touch; in cataract, the tension will feel normal when compared to that of your own eye. If one should take the fields of vision he will find defects in the glaucoma case, while in uncomplicated cataract they will be normal.

How do we know, in a case of mature cataract whether it is operable? This is determined by taking the fields. By having the patient close his eyes and throwing the light into the patient's eye from all angles to determine whether he can see the light from all directions one proceeds to take the fields. The farther away the light is held, the more delicate the test is made.

In closing, I wish to emphasize the fact that the eye is only one of the various parts of the human body and cannot be treated without considering the body as a whole. Just because we find that a man has a plus Wasserman or Kahn, it does not necessarily mean that his eye condition is due to syphilis, for a syphilitic may have any acute or chronic infectious disease or deficiency disease as well. I would not think of treating a case of syphilitic interstitial keratitis with anti-luetic treatment alone. If I did, I would soon lose my patient. He would not get well. They must all be built up with tonics and proper feeding. The same holds good for phlyctenular keratitis and many other eye conditions. This is where we need the practitioner to help us. Their diet must be well regulated; they must be fed the proper food, at regular intervals, and they must have sunshine. We tell the parents to lock them out of doors. This type of child always wants to get in a dark corner and cover his eyes, which, in my experience, is the worst possible thing for him to do.

I will not touch on the allergies as that would get me too involved. We realize now, that many diseases which formerly baffled us, are due to lack of vitamins, or deficiency disease. That is one reason why I laid stress in the beginning of my talk today, on treating the patient as well as the disease.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

HERMANN BREHMER who, in 1859, founded the first tuberculosis sanatorium, believed that carefully graded exercise, alternating with rest periods, was the important element in the treatment of pulmonary tuberculosis. One of his patients, the physician Peter Dettweiler, observed in his own case that symptoms were aggravated by exercise and subsided with rest. His disagreement with Brehmer led him to establish his own sanatorium in which rest was regarded as the cardinal need of the patient. The test of time has substantiated Dettweiler's views that rest, supplemented by good nutrition and fresh air is the essential element of the cure. Meantime, the role of exercise in the treatment of tuberculosis has almost been forgotten — for which reason a current article on exercise by an alert sanatorium physician is timely. Abstracts of the article follow.

EXERCISE IN TUBERCULOSIS

There is still a wide divergence of opinion among tuberculosis physicians concerning exercise in the treatment of tuberculosis. Aside from the judgment of the physician, the time to start exercise and the amount to be taken are dictated by the physical makeup of the sanatorium and by the size of the nursing staff. For example, in the cottage type of sanatorium, patients get more exercise going to meals than in a sanatorium built entirely under one roof; and where there is a shortage of nurses the patients do more for themselves.

Tuberculosis specialists differ in their views as to what constitutes exercise. Those who believe in strict bed rest will consider every activity of the patient short of resting quietly in bed as exercise. Sitting up in bed, writing letters, drawing, knitting and so on are exercise by that standard. Others hold that only such activities carried on after the patient is clothed and ready for outdoor walks, merit the term exercise. The majority steer a middle course between those two extreme views.

Patients do not react alike to the same amount of exercise; mild exercise for one patient may be strenuous exercise for another even though the patients have a comparable disease. In general, any activity which produces severe fatigue should be halted, for fatigue is a symptom of overstrain.

Exercise should be prescribed and graduated according to the individual need of the patient. Malaise, fever, rapid pulse and marked fatigue are constitutional symptoms indicating a toxic systemic reaction, and any patient with these symptoms should be in bed. Regardless of the X-ray, the sedimentation rate or the sputum contents, constitutional symptoms must be treated by strict bed rest. To treat every patient regardless of symptoms, or lack of symptoms, with strict bed rest is extreme.

Apparently comparable cases of tuberculosis, which have practically the same amount of disease by X-ray, seldom have the same symptoms to the same degree. One must distinguish between local and constitutional symptoms in tuberculosis just as one must distinguish between local and constitutional symptoms if one treats a boil. A boil produces pain, swelling, redness and local heat and can be treated as a local affair, usually. But if the patient develops malaise, fever, and loss of appetite the boil ceases to be a local affection and the constitutional symptoms demand the patient be put to bed and adequate systemic measures be used. The same holds true in tuberculosis even though many sanatoria have lost sight of such a fact. Local symptoms and constitutional symptoms have a far different meaning, and any patient with constitutional symptoms should be on fairly strict bed rest until all constitutional signs and

symptoms subside and the disease becomes stabilized. After that he may be allowed a graduated amount of exercise if other signs are favorable.

Patients with minimal disease and positive sputum whether they have cough or not should be in bed also. There are a few patients who raise positive sputum without coughing. They believe that the sputum raised is not sputum in the true sense unless they cough it up and many must be coached in order to produce a specimen of sputum for examination without undergoing gastric lavage. Exercise in such patients should not be permitted until a sufficient period of bed rest or a collapse measure in addition to bed rest has converted the sputum and given the disease time to become stabilized.

No patient with active tuberculosis regardless of the stage of the disease or the presence or absence of symptoms should be allowed to indulge in any activity to the point of fatigue.

In most sanatoria the amount of exercise is regulated but when the patient leaves exercise cannot well be controlled. Especially in those instances where the economic status requires the patient to work, a rehabilitation program covering a period of months is absolutely necessary. Arrested tuberculosis is not healed nor cured tuberculosis, yet patients are discharged from sanatoria as arrested cases whose only alternative is to go to work in order to support themselves. The greatest necessity in the field of tuberculosis at the present time is a rehabilitation program.

A few chest specialists allow their patients an amount of exercise almost equivalent to the regimen of one on vacation. Such physicians seem to feel that the mental state of the patient is so important in the healing of tuberculosis that a great deal of activity is justifiable in order to keep the patient from becoming introspective. The relationship between a patient's immunological reaction to disease and his introspectiveness has never been proved and has no factual basis. Rest will heal tuberculosis. A healthy mental outlook without physical rest is not sufficient for the healing of tuberculosis.

Another theory of the exercise extremists is a fatalistic one which also calls on biological immunity and resistance for support but here again the facts do not support the theory. The extremists justify the exercise in the mistaken belief that a patient with average resistance will heal his tuberculosis even on exercise while no amount of bed rest will cure a patient who doesn't have average resistance. The idea is

truly fatalistic. Conservatism in exercise is necessary for a favorable result in the majority of cases of tuberculosis. Rest is the greatest single factor in the healing of tuberculosis exclusive of collapse measures.

The general use of collapse measures such as pneumothorax has changed the course of the disease in thousands of cases. Too often the patient is put back on his feet immediately because of the improvement following collapse. In some clinics patients are not even put on bed rest during the pneumothorax induction period. But an immediate satisfactory collapse does not mean that the disease is healing—collapsed disease is not healed disease. Spreads do occur in well collapsed lungs, empyema frequently occurs and new disease often appears in the contralateral lung. Patients with well collapsed fresh disease should not be allowed exercise immediately no matter how well they look or feel. Collapse measures are not a substitute for bed rest. A well regulated rehabilitation program will prevent relapse in many cases.

Exercise in Tuberculosis, A Plea for Conservatism, by William J. Habeeb, M. D., *Ohio State Med. Jour.*, Vol. 36, No. 6, June, 1940.

ANNUAL FALL CLINICAL CONFERENCE, KANSAS CITY SOUTHWEST CLINICAL SOCIETY

The Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society will be held in Kansas City, Missouri, September 30 through October 3, 1940.

Guest speakers includes Drs. Arthur M. Alden and Quitman U. Newell, St. Louis; Dr. John Alexander, Ann Arbor; Dr. Chas. A. Bahn, New Orleans; Drs. C. J. Barborka, James G. Carr, and Fred M. Drennan, Chicago; Dr. Willis C. Campbell, Memphis; Dr. Elliott C. Cutler, Boston; Dr. Thomas Fitz-Hugh, Jr., Philadelphia; Dr. L. H. Garland, San Francisco; Dr. Roscoe R. Graham, Toronto; Drs. L. Emmett Holt, Jr., John T. King and Harvey B. Stone, Baltimore; Dr. James S. McLester, Birmingham; Dr. Bedford Shelmire, Dallas, and Dr. Ira R. Sisk, Madison.

In addition to these guests, twenty-nine members of the Clinical Society will appear upon the program which this year will be conducted as a single general assembly each of the four days. Two evening panel discussions will be presented, one upon anemia and the other upon the heart, each to be followed by open discussion by the audience.

Additional features include scientific and technical exhibits; daily round table luncheons; radio broadcasts; an evening of entertainment for the physicians; entertainment for the visiting women and alumni dinners.

If you have not received the August issue of the *Kansas City Medical Journal*, which carries the scientific program, write the executive office, 208 Shukert Bldg., for one now. Registration for the entire conference, \$5.00. Send in for an associate membership blank with your registration fee and get your membership card in advance of the dates of the meeting.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

Owned by the Arkansas Medical Society and Published
under direction of the Council

W. R. BROOKSHER, M. D., Editor
610 First National Bank Bldg. Fort Smith, Arkansas

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also marked copies of newspapers containing matter of interest
to the membership.

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EDITORIALS

MEDICAL DEFENSE PREPARATIONS

Adequate medical defense is vital in modern warfare. Properly, therefore, the Council on National Defense has asked organized medicine for full cooperation in a census of American physicians and in preliminary organization for the complete preparedness of the United States against aggression. The last war taught us the value of trained men, sufficient equipment and organized medical services, both in the armed forces and at home.

As a first step, questionnaires have been sent all physicians in the United States, the completion and filing of which in the offices of the American Medical Association, will provide accurate information as to the availability of medical men and their proper distribution. No hit and miss plan of voluntary enlistment by physicians is contemplated in the future but rather a proper distribution of medical service, civilian and war, that the best interests of the country may be served.

Return of the questionnaires has not been as prompt as is desired. In particular does Arkansas rank low in percentage of returned ques-

tionnaires. The Journal makes a special plea to all physicians, members of this Society or not, to promptly complete and return the questionnaires so that the work of the Committee on Medical Preparedness of the American Association may proceed to its next phase. Members of the Society are especially requested to ask the cooperation of non-member physicians. Preparedness is as much their job as ours. If questionnaires have not been received, or if they have been misplaced, duplicates will be mailed on request to the state secretary.

THE 1940 SESSION OF THE AMERICAN
MEDICAL ASSOCIATION

The New York session of the American Medical Association was the largest on record, the total attendance being 12,864. Arkansas attendance was quite low this year. Frank H. Lahey, of Boston, was elected President-elect; Chevalier Jackson, of Philadelphia, received the Distinguished Service Award, and the 1943 convention was awarded to San Francisco. The 1941 session will be held in Cleveland, and that for 1942 in Atlantic City, as determined at previous meetings, the place of meeting now being determined three years in advance. Special praise is due the medical profession of New York for the smooth and efficient operation of the meetings, a difficult task in a metropolitan center.

The House of Delegates concerned itself with a number of important matters, all of which received the most thoughtful consideration. Overshadowing all others, however, was the attention paid to the matter of military preparedness. A resolution was adopted offering the full facilities of organized medicine to the government in the vital program of complete preparedness. A Committee on Medical Preparedness, with state components, was set up at the request of military authorities for the purpose of surveying the medical needs of the nation and to subsequently provide for the induction of medical men into the armed services through a county quota system which is expected to obviate a shortage of physicians for civilian needs in some sections as occurred in the last war. This was the year for reapportionment of delegates to the House of Delegates and Arkansas retained its two delegates. A new section, Anesthesiology, was inaugurated. Secretary West revealed that membership in the American Medical Association, had reached its highest peak, 115,381 while there are 71,168 fellows.

PROCEEDINGS OF SOCIETIES

The First Councilor District Medical Society will meet at the Community House, Osceola, October 2nd at 10:00 a. m. The following program will be presented: "Gout," C. H. Lutterloh, Hot Springs National Park; "Ruptured Inter-vertebral Disc," Francis Murphy, Memphis; "Differential Diagnosis of Rheumatic Affections," O. C. Melson, Little Rock; "Acute Rheumatic Fever," N. S. Stern, Memphis; "Etiology of Chronic Arthritis," W. T. Swink, Memphis; "Rheumatism as a Social and Economic Problem," W. C. Colbert, Memphis; "The Use and Abuse of Physiotherapy in Chronic Arthritis," J. F. Hamilton, Memphis, and "Medical Treatment of Rheumatoid Arthritis," W. C. Chaney, Memphis.

D. C. Lee, Hot Springs National Park, recently addressed the staff meeting of the Leo N. Levi Hospital on "Chronic Pyelonephritis."

The Southeast Arkansas Medical Society met for a fish dinner as guests of the Lake Village physicians in July. Speakers were: H. T. Smith, McGehee, and W. C. Chaney, Memphis.

The Independence County Medical Society met in dinner session August 12th for the following program: "Fracture of the Leg," O. J. T. Johnston; "Carcinoma of the Stomach," "Chronic Ulcerative Colitis," J. J. Monfort, and "Obstetrical Fractures of the Humerus," M. S. Craig.

J. J. Monfort, Secretary.

PERSONALS AND NEWS ITEMS

Scholarships for study in public health have been awarded: K. T. Moseley, Texarkana, to Harvard; A. S. J. Clarke, Ozark, to Harvard; E. J. Easley, Arkadelphia, to Johns Hopkins, and M. G. Lawson, Benton, to Harvard.

The DeQueen Clinic, operated by I. G. Jones and L. G. Kimball, was opened July 19th.

M. H. Scott, Jenny Lind, took special work in anesthesia at Toledo, Ohio, during August.

R. C. Kory, Little Rock, spent an August vacation in Mexico.

M. B. Leverett, McGehee, has recovered from an appendectomy.

Weldon Lamb, formerly of Kansas City, has become associated with his brother, W. M. Lamb, in practice at Paragould.

J. W. Nicholls, Helena, recently participated in the program of the National Association of Coroners in Philadelphia.

Claude Barnett has joined the staff of the Estelle Hospital at Heber Springs.

A. W. Thompson has been appointed medical director at the Benton County health unit, succeeding J. B. Tucker, who resigned.

Neal Compton has been appointed director of the Bradley County health unit.

R. E. Smallwood has been appointed medical director of the Garland County health unit.

W. T. Lowe, Pine Bluff, has been elected chairman of the advisory board for the Community Hospital Plan of Jefferson County. Other members of the board are W. A. Snodgrass, Jr., and John K. Walker.

Members of the advisory board of the Community Hospital Plan for Phillips County are W. B. Connolly, J. W. Nichols, and Joe King.

Members of the advisory board for Group Hospitalization in Southeast Arkansas are J. P. Price, Monticello, Chairman; E. E. Barlow, Dermott; B. Z. Binns, Monticello; J. H. Burge, Lake Village; B. C. Clark, Lake Village; M. C. Crandall, Wilmot; C. W. Dixon, Gould; S. W. Douglas, Eudora; J. H. Hellums, Dumas; W. J. Hunt, Warren; Rufus Martin, Warren; H. T. Smith, McGehee, and J. S. Wilson, Monticello.

The staff and personnel of the Holt-Krock Clinic, Fort Smith, held their annual picnic at Lake Fort Smith, August 8th.

A. F. Hoge, Fort Smith, suffered a fracture of the humerus in July.

Dr. and Mrs. H. Moulton, Fort Smith, spent an August vacation in Colorado.

A. C. Modelevsky recently addressed the Jonesboro Rotary Club on syphilis control.

L. K. Hundley, formerly Bradley county health director, has been assigned to the trachoma control service of the State Board of Health.

O. P. McMillan, formerly of San Antonio, has become an associate of L. G. Fincher at El Dorado.

Earle H. Hunt has been elected vice president of the Clarksville Rotary Club.

J. Harry Hayes, Little Rock, attended the Lions International Convention in Havana during July.

W. A. Pickens, Bentonville, has been elected vice president of the Benton county chapter, National Foundation for Infantile Paralysis.

Dr. and Mrs. M. E. Foster, Fort Smith, spent an August vacation in Colorado.

Dr. and Mrs. H. H. Smith, Fort Smith, spent an August vacation in New York.

Dr. and Mrs. E. C. Moulton, Fort Smith, spent an August vacation in Colorado.

C. J. Steed has been elected president of the Gurdon Rotary Club.

Dr. and Mrs. B. A. Rhinehart, Little Rock, spent an August vacation at Pacific coast points.

A. G. Emerson, Bald Knob, spent a recent vacation in the West.

W. J. Hunt and L. E. Ellison have been elected second vice commander and surgeon, respectively, of the Warren Post of the American Legion.

W. H. Daubs has moved from Lewisville to Foreman.

Fielding A. Poe, formerly of Saint Louis, has located in Paragould for practice.

The following naval reserve officers were on active duty during August: Harvey Shipp, Glenn Johnson, and Raymond Cook, all of Little Rock.

Dr. and Mrs. B. A. Bennett, Little Rock, took a motor trip through Yellowstone Park, Oregon and other western points in August.

Ulys Jackson addressed a recent meeting of the Boone County Tuberculosis Association at Harrison.

A. F. Hoge, Fort Smith, recently took special work at Tulane University in New Orleans.

A. J. Brittain, Conway, suffered a fracture of the hip August 9th.

Dr. and Mrs. C. S. Means, Fort Smith, spent an August vacation in Colorado.

MARRIED—On August 11, 1940, at Oklahoma City, Jeff Banks, Little Rock, and Miss Tempa Karnes, West Fork.

Dr. and Mrs. Virgil Payne, Pine Bluff, spent an August vacation on the Mississippi Gulf coast.

Dr. and Mrs. J. G. Gladden, Harrison, motored to Washington, D. C., other eastern cities, and through Canada in August.

Drs. Dewell Gann, Sr., and Dewell Gann, Jr., spent a recent vacation in New Orleans and on the Mississippi Gulf coast.

RADIUM WANTED

\$2,000.00 available to buy used radium, tubes or needles. University of Arkansas School of Medicine, Little Rock, Arkansas.

OBITUARY

JOHN H. MURPHY, age 62 years, died at his home in Opal, August 14th. Born January 13, 1879, at Glen Rose, Texas, he had practiced in Polk county since 1905. In the Polk County Medical Society, he had served in the various offices and was a member of the Masonic lodge. Surviving relatives are his wife and a daughter.

AMERICAN BOARD OF OPHTHALMOLOGY

There will be only one written examination during 1941. This will be held in various cities throughout the country on March 8th.

Candidates enrolled in the Preparatory Group who have been advised that they will be eligible for examination during 1941 should make application AT ONCE to take this written examination.

Application must be made on the regular blanks provided for the purpose and must be received in the Board Office before December 1, 1940.

Oral Examinations 1941: Cleveland, May or June; October (place to be announced later).

Deadline for Case Reports: February 1st, July 1st.

If you plan on taking your examination during 1941, please write at once to the Board Office for formal application blanks, indicating your preference of examination place.

AMERICAN BOARD OF OPHTHALMOLOGY
6830 Waterman Avenue
St. Louis, Missouri

The Oklahoma City Clinical Society announces in this issue that its Annual Fall Conference will be held October 28 to 31, inclusive, at the Biltmore Hotel in Oklahoma City. The list of guest speakers carries the names of many of the outstanding men in medicine and we are assured of a diversified, well balanced program.

The meeting is arranged primarily for the general practitioner, and there will be four days of lectures and symposia on every phase of medicine, with particular reference to its applicability by the doctor in general practice. An ad elsewhere in the Journal sets forth the guest speakers and their specialties.

Dr. Nathan B. Van Etten, President of the American Medical Association, will address the banquet given by the Oklahoma County Medical Association in his honor on Monday evening, October 28. The annual clinic dinner and dance will be held at the Chamber of Commerce Tuesday, October 29, and on the night of the 30th, the Smoker, an affair anticipated from year to year, will be held at the Oklahoma Club.

The meeting is an intensive post-graduate course, broken by well timed hours of pleasure. We recommend it to every practicing physician.

RANDOM THOUGHTS OF THE SECRETARY

July 30th. In the conflict raging overseas human life is being made wantonly cheap, a great contrast to this country of ours where noble efforts are being made to make life better and happier for all of us. Yet, most of us take our freedom, our life and our happiness too much for granted. Again must we become imbued with the spirit of 1776. To keep these we must love and cherish our country; we must hold it dear. We must overcome selfishness of our respective sections; we must deny personal gain at the expense of others; we must be careful that blind partisanship does not impede free discussion of issues which face us.

July 31st. We make rounds with Wolfermann this day observing clinical medicine in all its ramifications from packing sulfanilamide into a wound to post-operative care including attention to disgruntled patients who can not get ice bags when they need them. Our most illuminating experience this day is the conflict between the roentgen and the clinical diagnosis of acute intestinal obstruction where we must perforce yield to the clinicians.

August 1st. Who remembers the other Roosevelt who asked for a third term?

August 12th. This evening in company with Sophie and I. F. we motor to John Burns' atop Mt. Gayler, enlivening the trip with political discussion and anecdote.

August 13th. On this election day we observe that the Arkansas Gazette editorially approves of Willkie's stand on the Democratic campaign book, as well it may.

August 14th. The ones who "told you so" occupy the center of the stage today and it is difficult to find those who voted a losing ticket. To Carl Bailey, retiring from politics after an active decade, we tip our hat; we never had reason to feel that he was not a friend of the medical profession nor that he was not our active supporter in aims for the betterment of Arkansas and its people. In Homer Adkins, we feel that we shall have similar hearty cooperation, and to his efforts for the advance of our state, all physicians will lend cordial aid.

August 15th. Comes the story of the farmer who wrote a letter to the railroad telling the story of the bull which was hit by the train. A verbatim copy will be mailed to any reader who makes statement that he has answered at least one advertiser's message in this issue of The Journal.

COMING MEDICAL MEETINGS

Kansas City Southwest Clinical Society, Kansas City, September 30th-October 3rd, 1940.

First Councilor District Medical Society, Osceola, October 2nd, 1940.

Oklahoma City Clinical Society, Oklahoma City, October 28-31st, 1940.

Arkansas Medical Society, Little Rock, April 14-16th, 1941.

American Medical Association, Cleveland, June 2-6th, 1941.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

The objectives of the Woman's Auxiliary to the Arkansas Medical Society for the year 1940-1941 are:

For members:

1. Understand the purpose and objectives of her Auxiliary. Endeavor to attend Auxiliary meetings regularly; to pay annual dues promptly. Invite other eligible women to become members.

2. Familiarize yourselves with the aims and purposes of a Medical Auxiliary and the methods of organization. Know the names of County Advisor and of the State Advisory Committee and the names of County and State Auxiliary Officers and Chairmen.

3. Accept Chairmanships of health and welfare in other organizations, or any office which will advance Medical Auxiliary work.

4. Present a good health education program in your Auxiliary and inform and direct laymen on approved programs on health. Use the radio for good health talks by doctors whenever possible.

5. Be informed on current legislative matters both in the state and nation. Know what bills are before the Senate and House and if you do not understand them, get a doctor to speak on these bills. Know the platform of the A. M. A. so that you can talk intelligently on what the medical profession wants.

6. Read the state Journal. Send Auxiliary news items to Mrs. H. E. Murry, of Texarkana, promptly so that the women's page will be full.

7. Let's make our slogan for Hygeia, "Every member responsible for one subscription to Hygeia this year, whether it is a gift or for personal use." Write to our State Hygeia Chairman and enter the national Auxiliary Hygeia contests. Let's sell Hygeia this year for it is the only health magazine published by the American Medical Association.

8. Assist in entertainment of County, District and State Medical meetings and promote unity and friendliness at all times.

9. Assist your local Auxiliary in the preparation of an exhibit for the state convention. Keep scrapbooks and bring them for the exhibit at the state convention.

10. Let's do everything we can to put over our Student Loan Fund. Make a special attempt this year to do more for our splendid Student Loan Fund than ever before.

11. Have you had a Cancer Control Drive? If not, won't you put forth every effort to make this a success in your town?

12. This year we have a Library Fund Committee, it is a fine project and we want every Auxiliary to assist the work of this Committee.

13. Won't you as an individual member help to organize new counties just by being friendly and interested in those counties where there are no Auxiliaries. If you know of a county which you think would organize, won't you write the State Chairman of Organization so that she can see if the County Advisory Board wants an Auxiliary in that respective county?

14. Have as many Public Relations Meetings as is possible, always securing splendid, well informed speakers.

For Presidents:

1. Each County President and District Chairman upon taking office should secure an Advisory Committee or Councilor from her local Medical Society and be guided in all activities by them.

2. County Presidents should appoint Chairmen corresponding to State, Southern and National Auxiliaries. Do not be discouraged if your group is a small one, do what you can, for naturally a great many of our groups will be small as we are made up only of doctor's wives. This fact alone should bind us closer together.

Here are the respective Chairmanships in the State:

- | | |
|----------------------------------|--|
| 1. Organization. | 11. Memorial and Chaplain. |
| 2. Education and Public Health. | 12. Finance Chairman. |
| 3. Hygeia. | 13. Historian. |
| 4. Public Relations. | 14. Ilse F. Oates Student Loan Fund. |
| 5. Press and Publicity. | 15. Jane Todd Crawford Memorial. |
| 6. Legislation. | 16. Archives. |
| 7. Cancer Control. | 17. Exhibits. |
| 8. Physical Health Examinations. | 18. Research in Romance of Medicine. |
| 9. Constitution and By-Laws. | 19. Library Fund Committee. |
| 10. Doctor's Day Observance. | 20. Circulation Manager of the Bulletin. |

3. County Presidents please send new or corrected copies of their Constitution and By-Laws to the State President and State President-Elect.

4. Arrange a Health Education program for each meeting of your Auxiliary. Suggestions for programs from your State Education and Program Chairman should help you. Secure good speakers through your advisors.

5. Have a Public Relations meeting as often as is possible for all lay organizations in your county, presenting to them health programs arranged in cooperation with your advisors.

6. Observe Doctor's Day some time in March. On this day honor the doctors who have dedicated their services to humanity and commemorate achievements of all doctors.

7. Contribute to our Ilse F. Oates Loan Fund, it is our own and we must try and reach our goal of \$5,000.00.

8. It is important that the local histories be recorded after each administration. Research in Romance of Medicine should be encouraged. It is to collect historical data about physicians and achievements in Arkansas, and such materials as old medical books and instruments, old drug and laboratory implements and material, old books in families where physicians are no longer living. Copies of all important papers of your Auxiliary should be sent to the Chairman of Archives.

9. At the Post-Convention Board Meeting of the Woman's Auxiliary to the American Medical Association, Mrs. Holcombe asked that we have a circulation manager of "The Bulletin" for our state. Her duties are to write the Officers, Chairmen and Councilors of the State, all County Presidents, and County Officers and urge them

to take the Bulletin. It is \$1.00 for the year and should be in the hands of every State and County Officer. Every member would benefit greatly by it.

10. County Presidents, State Chairmen may send their recommendations to you, so please give them to your County Chairmen. Much of the information does go through the office of the County President. However if your County Chairmen correspond to the State Chairmen, the correspondence will go to them direct.

11. Jane Todd Crawford Memorial—to promote appreciation of Mrs. Crawford's contribution to Medical Science and to women everywhere.

12. Won't you urge every member of your Auxiliary to be responsible for one copy of Hygeia this year, please?

13. Let's make our Physical Health Examination Record for the state 100% perfect this year.

Make this a year of individual responsibility for our Auxiliary! Let us put forth every effort to assure another year of service to the Arkansas Medical Society.

On July 15 the Medical Society and Auxiliary of Southwest Arkansas were entertained by the doctors of Lake Village at a fish dinner, which was served to a large attendance in the Legion Hut. After dinner Dr. H. T. Smith, of McGehee, President of the Arkansas Medical Society, made a talk to the entire assembly, and especially asked the cooperation of the Auxiliaries in putting forward his program for the year. A short business session was held over which Mrs. J. W. Swartz presided in the absence of the President, Mrs. Chas. Dixon. The Auxiliary voted to send \$10.00 to the Student Loan Fund.

A son was born to Dr. and Mrs. M. C. Hawkins, of Parkdale, at the Lake Village Infirmary, July 22.

The annual fall board meeting will be held in Little Rock, September 26, 1940. All state officers, councilors, state chairmen, county presidents and county officers are urged to be present at this time.

Mrs. William Hibbitts, wife of Dr. William Hibbitts, of Texarkana, has been named President of the Texas Medical Society Auxiliary. Mrs. Hibbitts will succeed Mrs. Scott Applewhite, of San Antonio, who resigned because of ill health.

Vacation days are almost over and now comes the time to think seriously of the work of the Woman's Auxiliary to the Arkansas Medical Society for the year 1940-41.

The year 1940-41 presents many opportunities for the promotion of the work. Our goal is a high one, "every eligible doctor's wife an Auxiliary member." To achieve this goal we must use our efforts to enlist the unorganized counties.

Mrs. Richardson, state secretary, has drawn a very comprehensible map, showing the ten districts and counties having active organizations, and counties once having Auxiliaries so the first vice president has a very good working knowledge of the set-up.

The Auxiliary work goes hand in hand with the medical society and serves through the following channels, health, education, public relations, legislation, philanthropy, and social activities. Through various sources we can enlighten the public concerning medicine and medical practice. The doctor's wife must first be informed, so that she can pass the knowledge on, and there is no better way than for her to be an Auxiliary member.

By being an Auxiliary member, she is more able to serve on program committees of other organizations.

We must first convince the doctor's wife that the Auxiliary is not just "another club," but an organization distinctly for a doctor's wife. By having an active Auxiliary in each county, the bond between the Auxiliary members and ladies of other organizations is strengthened.

The public is anxious to be informed along health lines and an Auxiliary member is the logical one to do it.

The enlistment committee hopes to contact all unorganized counties so that the work of the Auxiliary will be state-wide. Much good has accrued from the interest already shown, so that it behooves each Auxiliary member to use her influence and time to enlighten others.

The work for this year has already started off nicely. Columbia county reports a new organization and requests have come from other counties wishing organizations.

Mrs. Hathcock, state president, is anxious that we secure more Auxiliaries, not for the sake of numbers, but for the promotion of the objects of the Auxiliary.

The work of the organization committee is the groundwork for all other Auxiliary activities, so this committee must strive early to achieve this task, and do it well.

Our work lies with the organization as well as unorganized counties.

Let us try to accomplish our goal "every eligible doctor's wife our Auxiliary member."

MRS. EDWARD D. McKNIGHT,
Chairman of Organization, Brinkley, Arkansas.

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BOOK REVIEWS

Synopsis of Principles of Surgery: By Jacob K. Berman, A. B., M. D., F. A. C. S. Assistant Professor of Surgery, Indiana University School of Medicine, Indianapolis. Pp. 615. 274 illustrations. Price \$5.00. St. Louis: The C. V. Mosby Company, 1940.

This is a handy reference book for the general practitioner as well as surgeon, although it is written principally as a textbook for the medical student. It is written to correlate the basic sciences with the fundamental principles of surgery. The approach is through the pathological and bacteriological side of surgery. The chapters which are particularly good are those on "Infection of the Human Constitution," "Interchange of Body Fluids," and "Acid Base Balance." The two latter are very valuable in showing the possible errors of pre- and post-operative treatment with glucose and other fluids intravenously and by hypodermoclysis. The book is, as its title indicates, only a synopsis and deals briefly with the subjects but in a practical manner.

Clinical Diabetes Mellitus and Hyperinsulinism: By Russell M. Wilder, M. D., Ph. D., F. A. C. P. Professor and Chief of the Department of Medicine, The Mayo Foundation for Medical Education and Research, University of Minnesota; Head of the Section on Metabolism Therapy, Division of Medicine, The Mayo Clinic, Rochester, Minnesota. 459 pages with 19 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$6.00.

This thesis is limited to clinical consideration, which has proved most effective in recognition and treatment of diabetes and complications. The opening chapter is devoted to a brief discussion of normal blood sugar levels and factors which influence changes in levels, mechanism of insulin action, etc., followed by a discussion of non-diabetic glycosurias. One could not keep from being keenly impressed with the elaborate chapter devoted to the management of acidosis and coma, in which the author gave his unbiased opinion of all methods in use, and again brings to our attention the use of alkalis in combatting acidosis. He feels that after Ketone formation has been controlled by giving insulin, the carbon dioxide combining power of the plasma may remain at such low levels, death may ensue if not corrected by the administration of alkali. The chapter devoted to diets of past and present, with an outline of diets at the Mayo Clinic, is discussed. Finally, the chapter devoted to hyperinsulinism is timely and should be very helpful to every physician who has the responsibility of treating diabetes.

Modern Dermatology and Syphilology: By S. William Becker, M. D., Associate Professor of Dermatology and Syphilology, Kuppenheimer Foundation, University of Chicago, and Maximillian E. Obermayer, M. D., Assistant Professor of Dermatology and Syphilology, Kuppenheimer Foundation, University of Chicago. 461 illustrations. 32 colored illustrations. Pp. 871. Price \$12.00. Philadelphia: I. B. Lippincott Company, 1940.

In this volume several definite departures have been made from the style of the standard texts of dermatology. The present volume is useful both to the student and the practitioner of medicine. The book is written in an informal style. Explanatory material has been

incorporated at the beginning of each chapter, under "Orientation," in the language of the demonstrator to a small group of students. Methods used in treatment of functional dermatoses, which have been used successfully by the authors are given. The discussion of drug eruptions and allergy is covered thoroughly. An entire chapter is given to consideration of modern therapy, followed by prescriptions and detailed instructions in preparation and use of medicaments. The general field of dermatology and syphilology is thoroughly covered.

Medical Nursing: By Edgar Hull, M. D., F. A. C. P., Clinical Professor of Medicine, Louisiana State University School of Medicine; Christine Wright, R. N. B. S., Graduate and Instructor in Nursing Arts, Charity Hospital School of Nursing, New Orleans, 1928-1929, and Ann B. Ely, B. S., Assistant Dietitian, Cook County School of Nursing, Chicago. Pp. 587. 168 illustrations. 11 color plates. Price \$3.50. Philadelphia: F. A. Davis Company, 1940.

In this text the special features of nursing and medical cases are fully discussed and special attention is given to metabolic, allergic and deficiency diseases, not ordinarily covered in such texts. The book is well-written as a whole and effort is consistently made to teach the student "why" so that she may the better know the "what."

The Compleat Pediatrician: By Wilburt C. Davison, M. A., D. Sc., M. D., Professor of Pediatrics, Duke University School of Medicine, and Pediatricist, Duke Hospital. Third Edition. Pp. 256. Price \$3.75. Durham, N. C., Duke University Press, 1940.

This edition, as the previous one, lays emphasis on symptoms and signs rather than on description of diseases. It is written from a practical and not a theoretical point of view. It is, therefore, an excellent book for anyone, particularly a general practitioner, to have with him at all times. This edition has been brought up to date and covers all the newer advances of our knowledge of disease as well as treatment. It is not a book to be digested, but one which can be used as a reference for any particular case or symptoms. I am unable to find any symptoms, treatment or disease used in pediatrics which are not mentioned here. It is really an encyclopedia of information on all phases of pediatrics arranged in a logical and connected manner.

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SURGICAL RELIEF OF PAIN*

J. JAY KEEGAN, M. D.

Omaha, Nebraska

Pain is the symptom which most commonly brings the patient to the physician and interpretation of pain is a most important factor in the diagnosis of disease. Treatment of pain without proper diagnosis often leads to serious results, either by masking symptoms or misdirected surgery. Volumes have been written on the ramifications of this subject in the practice of medicine. This paper must be limited to neurosurgical relief of pain which, either because of lack of known cause or of insurable disease, must be treated symptomatically. Before beginning this discussion it seems proper to make a few remarks about the misuse of morphine in neurologic conditions.

Morphine is a very dangerous drug in states of disturbed consciousness, either irrational restlessness or stupor, for it then converts struggling consciousness into coma and seriously depresses an already embarrassed respiratory center. This applies particularly to head injuries where irrational restlessness is misinterpreted as due to pain, or it seems desirable to quiet a noisy and uncontrollable patient. It is much better for these patients to let them roll around in bed and be noisy than to put them out with morphine or any strong sedative and too often the head injury is blamed for the death when a hypodermic of morphine is directly responsible. Every neurologic surgeon has learned this great danger both in head injuries and brain tumors and morphine is prohibited in these cases. A few case illustrations may briefly be given: (1) a man four days after head injury and fractured femur continued to be slightly irrational and was given a hypodermic of morphine to start him on a long trip to a hospital. Four hours later he arrived in deep coma, cyanotic and temperature 106 de-

grees, apparently dying. Constricted pupils were noted, stimulants and elimination pushed vigorously, with beginning recovery after three hours, followed by complete recovery. (2) A young man with compound depressed skull fracture, repaired, continued extremely restless and noisy, disturbing the whole hospital. Warning was given against morphine but codeine and avertin sufficient to quiet him were tried with resultant cyanosis, high temperature and near death, but with satisfactory noisy recovery after one week's time. (3) A meningitis patient with screaming irrational restlessness was given one quarter grain of morphine without effect and this repeated, with coma, cyanosis and respiratory failure which required two hours of artificial respiration before morphine elimination restored the respiratory center and good recovery occurred. Similar effects of morphine in acute head injuries are more difficult to interpret but undoubtedly occur too often. Such patients need constant watching during the first 24 hours for early focal signs of intracranial hemorrhage which are concealed in the comatose patient with constricted pupils after morphine.

Pain which must be relieved by neurological surgery applies particularly to intractable pain of incurable disease in which morphine is unavoidable, ineffective or prohibitive in cost. Such pain may be classified into three types, neuralgic pain, neuritic pain and visceral pain.

True neuralgia is distinguished from neuritis by its sudden spasmodic stabbing, sharp, cutting or electric character, with intermissions and remissions during which there is complete freedom from pain. The best example is trifacial neuralgia or tic doloreux. There should be no question in diagnosis of this extremely painful spasm which comes and goes as the face is disturbed and has a primary trigger area on one branch of the fifth cranial nerve distribution. This pain is conceded to be the worst pain known and is demoralizing to the patient. He cannot talk or do anything but hold his face when the pain is

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

present and lives in constant fear of pain. Trifacial neuralgia is not uncommon and can be found in every small community in one or more elderly individuals who often suffer the tortures of the damned without hope or knowledge that relief can be obtained by relatively safe surgical measures. Too often the patient or the local physician is misinformed about the dangers and complications of the operation which will permanently relieve these sufferers. Age is no contraindication, the mortality is less than 1%, recovery is rapid, motor paralysis of the face does not occur and sight is not affected. The operation consists of a small trephine above the zygoma, separation of the dura from the bone down to the gasserian ganglion and nerve root, then differential section of the root of the fifth nerve, saving some medial ophthalmic fibers for corneal sensation and the motor root when possible. There are other methods of surgical approach to the fifth nerve root, through the cerebellar fossa, one in the lateral angle to cut the root near its entrance into the brain stem and the other in the floor of the fourth ventricle of the brain. These methods have not yet been established as sufficiently safe or better than the temporal route to warrant their use except in unusual situations. Alcohol injection of the peripheral branches of the fifth nerve can be done for temporary relief of trifacial neuralgia but the pain, risks, failures and recurrences associated with this procedure make it unsatisfactory to both the patient and the physician. To be successful, the alcohol must enter the sheath of the nerve.

Another neuralgia less commonly seen is ninth nerve or glossopharyngeal neuralgia, in which severe spasmodic pain is located in the tonsillar region and is brought on by swallowing. Cocaine anesthetization of the mucosa of this region stops the pain briefly and establishes the diagnosis. This nerve root can be sectioned with reasonable safety in the lateral angle of the cerebellar fossa, with complete and permanent relief from this pain. True neuralgias elsewhere are rare.

The subject of neuritis is much more complicated for here there usually is a recognizable cause which should be treated before any nerve section is considered. The name neuritis indicates inflammation of a nerve, which may be either infectious or traumatic. Infectious neuritis occurs most commonly in relation to acute respiratory infection and involves more often the cervical, brachial or thoracic nerves. The acute stage with severe pain should be treated med-

ically. Continuing pain may be treated by removal of foci of infection and fever therapy. Chronic pain from this cause, as in postherpetic neuritis, or many of the pains about the face and neck, is difficult to relieve satisfactorily. Surgery is limited in its application as extensive section of cervical dorsal nerve roots leaves too much disabling sensory loss in the arm and may not relieve, for some of this pain seems to come in by way of the sympathetic nerves at a considerable distance from the area involved. In the thoracic region, as in pain following intercostal herpes zoster, the dorsal sensory nerve roots may be cut by laminectomy, call rhizotomy, but this section to be successful must extend at least three roots above and below the superficially involved area. Paravertebral novocaine injection should always be done before any nerve section, to localize the nerves involved and determine if nerve interruption will relieve. Alcohol may be injected around the nerves and sympathetic ganglia in the paravertebral region, producing a longer anesthetizing effect than novocaine. This is particularly applicable to the visceral pain of angina pectoris which comes in through the left upper thoracic nerve roots by way of the sympathetic.

Traumatic or compression neuritis requires careful study of the local neurologic signs and symptoms. The idea that focal infection may cause remote pain has been considerably overworked and removal of tonsils, teeth or appendix after paralytic signs have appeared from nerve compression represents either ignorance or negligence in neurologic examination and interpretation. Referred pain does not produce numbness, motor weakness or tendon reflex change. Pain which radiates specifically along the course of a nerve, as down the leg or arm or around the trunk, is more likely to be organic nerve root involvement than referred pain.

The best example of mistaken interpretation of nerve root compression is the common syndrome of low back and sciatic pain, commonly called lumbago and sciatica, treated by innumerable minor and major procedures, all without accurate recognition of the underlying cause. A few years ago Mixter, Barr and associates established beyond question that this syndrome is commonly caused by pressure of a herniated intervertebral disc against a low lumbar or first sacral nerve root. Removal of this protruding cartilage promptly relieves the pain. Since then hundreds of these cases have been diagnosed and treated successfully by a limited laminectomy which does not impair the weight bearing

function of the spine. Important diagnostic signs are reduction of ankle jerk, slight sensory loss in the nerve root distribution, and demonstration of the intraspinal tumor by X-ray after intraspinal lipiodol or air injection.

Another example of mistaken interpretation of nerve root compression occurs commonly in spinal cord tumors where the root pain radiates around the abdomen. It is rare for a spinal cord tumor to be found without one or more preceding abdominal operations for relief of pain. This may be excusable before paralytic signs appear, but failure to recognize that nerve root pain at the level of the umbilicus represents a lesion as high as the 7th thoracic vertebra in the spine, often leads to failure to find vertebral pathology by X-rays taken at the level of the pain. Demonstration of spinal canal block by spinal puncture with jugular compression and increased fluid protein aids in the diagnosis. Surgery of intraspinal tumors by laminectomy offers a favorable field for results and should not be delayed until complete paraplegia develops.

Cervical rib syndrome illustrates nerve compression farther out on a nerve trunk. In this condition the lower border of the brachial plexus and the brachial artery are compressed behind the attachment of the scalenus anticus muscle to the first rib. The result is pain which radiates to the ulnar side of the hand with later trophic ulcers, reduction of radial pulse and ulnar paralysis. Simple surgical section of the attachment of the scalenus anticus muscle permits the artery and plexus to drop forward and relieves the nerve pressure and symptoms.

Malignant tumors of the vertebrae, either primary or secondary to carcinoma, are commonly the cause of prolonged unbearable nerve root pain, due to compression. Morphine is required in increasing doses until either it becomes ineffective or the cost is prohibitive. The patient may have several months or a year or more to live. Surgical relief for this pain can be given in a variety of ways, the best of which is cordotomy or section of the pain tract in the spinal cord. The nerves carrying pain and temperature sense enter the cord by way of the posterior roots, then cross to the opposite side and course in an antero-lateral tract which ascends to the thalamus of the brain. If this tract in the cord is cut there will be permanent loss of pain and temperature sensation starting about five nerve segments below that level on the opposite side, but no loss of touch or posi-

tion sense and no motor loss. This pain tract section is performed by laminectomy, usually at the level of the second or third thoracic vertebra for intractable pelvic or abdominal pain. The section must be properly done to give results and avoid complications. Recent work by Hyndmann seems to indicate that this tract overlaps the anterior root, with the thoracic fibers most medial. This necessitates that the incision begin slightly anterior to the dentate ligament and emerge near the midline of the cord, instead of at the anterior root as formerly practiced and perhaps accounting for some poor results. It should be emphasized that this operation can be done with reasonable safety on a considerably weakened individual, gives permanent complete relief from pain and does not cause any motor paralysis. Retention of urine may occur for two or three weeks, then recovers.

Sometimes malignant tumors of the vertebrae are too high to apply cordotomy as bilateral high cervical cordotomy causes paralysis of the diaphragm and considerable sensory disability in the arms. If the pain is unilateral and this arm already disabled then unilateral high cervical cordotomy or extensive dorsal nerve root section may be applied with satisfactory relief from pain.

Temporary relief from the intractable pain of pelvic malignant involvement can be given by intraspinal injection of 100% alcohol. This method has the disadvantage of commonly causing bladder paralysis and relief lasts only a few weeks or a few months at most. Recently an improvement in technique has been presented by Pitts & Broun in which it is emphasized that the one or two cubic centimeters of 100% alcohol injected should not be allowed to rise into an elevated sacral canal, where it paralyzes the sacral nerves and bladder, but should be kept in the lumbar canal by elevation of the spine at this level.

Neuritic pain of undetermined origin can sometimes be benefited by injections directly into or around the nerves involved. Preliminary novocaine injection should always be tried, first to determine the effect of anesthetization and second to observe some possible lasting benefit. This type of injection is best illustrated by novocaine saline injection into the caudal epidural space for sciatic pain of undetermined origin or directly into the sciatic nerve trunk when signs of neuritis are present. Alcohol injection or section of peripheral sensory nerves may be done for somewhat longer relief from pain, as in pain-

ful ulcers or thromboangitis obliterans of the lower extremities, where vasodilation of sympathetic paralysis adds a beneficial healing factor. This should not be done to a nerve carrying important motor fibers. Painful amputation neuroma may be relieved by alcohol injection but better by resection of the enlarged nerve end.

Pain of visceral origin is more difficult to diagnose and relieve because it is transmitted by the autonomic nerves which enter the paravertebral sympathetic ganglia and may travel considerable distance in this trunk before entering the spinal cord. Consequently dorsal nerve root section, or even cordotomy unless it is done quite high, may not succeed in giving relief from this pain. Diagnostic paravertebral novocaine injection of sympathetic ganglia should here be done, followed by similar alcohol injection, with prospect of fair relief. Section of sympathetic rami or removal of ganglia thus localized may be done for more lasting benefit.

Summary

Proper diagnosis should precede symptomatic treatment of pain.

Morphine is a dangerous drug in states of disturbed consciousness, particularly head injuries.

True neuralgic pain of sharp intermittent character, particularly trifacial neuralgia, can be satisfactorily and safely relieved by nerve root section.

Acute neuritic pain should be treated medically.

Chronic neuritic pain calls for careful neurologic interpretation and search for local cause.

Focal infection should not too readily be used as an explanation of definitely localized neuritic pain.

Paravertebral novocaine or alcohol injection or extensive dorsal nerve root section may be done for relief of intractable neuritic pain, but results are not entirely satisfactory.

Pain of nerve root compression within the spinal canal is often misinterpreted and much useless treatment given, including abdominal operations. It is distinguished by its segmental radiating nerve root distribution with altered sensation, reflexes or motor power.

Nerve trunk compression likewise presents peripheral anatomical nerve distribution of symptoms as in cervical rib syndrome.

Intractable pain of pelvic or lower vertebral malignancy can be satisfactorily relieved by section of the pain tract in the spinal cord, called cordotomy. Rather temporary relief can be given by intraspinal alcohol injection.

Local, nerve trunk and paravertebral novocaine injection is valuable to localize nerves involved and sometimes gives considerable lasting relief. Alcohol injections are applicable to peripheral sensory nerves and sympathetic ganglia for relief of visceral pain.

CESAREAN SECTION*

CHAS. R. HENRY, M. D.

Little Rock

Perusal of statistics on maternal mortality in the United States reveals to us that chief among the causes are toxæmias, infection, hemorrhage, and abortion. Searching into the causes of preventable death, we find that cesarean section is ever present with its astoundingly high figure. That cesarean section has saved and will continue to save lives of many mothers is not denied, but in order that we may obtain the best results with this valuable procedure, it is necessary that we use it in the proper manner. Many valuable contributions to medicine have fallen into disrepute, not because of their inherent worth, but because they have been injudiciously applied by the profession at large.

The high incidence of death following cesarean section is still appalling and justly must be lowered. While the mortality rate at large of cesarean section is 6-10%, it is certain to be higher in the poorly equipped hospital and in the hands of the occasional or unskilled operator. Were all deaths reported which were directly attributable to cesarean section it is my belief that we would be stunned with a still higher figure. It is known that the operation carries an irreducible mortality rate because in well equipped hospitals with highly efficient staffs there is 1.5-2% who die following this procedure. This is further exemplified by the fact that death followed cesarean section where there was neither vaginal nor rectal examination. With the advent of many small hospitals throughout the country making surgical procedures readily available to many physicians, it is expected that we shall see an increase in the number of cesarean sections performed. This

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 17, 1940.

being true, it is not untimely that we review our indications and tighten them in order that we may not see an increase in the death rate concurrent with the increase in the number of cesarean sections.

This operation has been the solution to any obstetrical problem in the minds of many men and certainly in many of these instances abdominal delivery did not offer a better prognosis for either mother or baby. Unfortunately the performance of the classical cesarean section usually does not tax the ingenuity of any operator and, as has been suggested by some, is fraught with less danger than a difficult operation performed per vaginam. In the clean case this statement is possibly true, but in the potentially or frankly infected case this is far from true. Obstetrics is closely allied to surgery and should be governed by the strict rules of that specialty. The obstetric surgeon should be as careful in the abdomen as his colleague who does bowel surgery, for he is dealing with an organ which is equally as dangerous. We need nothing more forceful than a review of the literature on the bacteriology of the uterus to impress this fact on our minds.

The American College of Surgeons has proposed certain rules to hospital staffs concerning the performance of cesarean sections, and chief among these is consultation with a member of the obstetrical staff before operation. Obstetrical judgment is as important as surgical skill, for a technically perfect operation at the improper time is a hazardous procedure. As has been aptly remarked, almost any physician knows enough to perform the operation, but the conservative doctor knows when not to operate. Too frequently the physician finds cesarean section the answer to an obstetric problem. Except in most urgent emergencies consultation should be held with one who has long experience in the art of obstetrics and who has trained himself adequately through post graduate study. The State Committee on Maternal health has proposed that a full time obstetrical consultant be employed with the idea of making this service available to a great number of physicians throughout the state. This full time man will be available as a consultant in many places.

Indications—absolute indications are few. Contracted pelvis heads the list. The true conjugate may be so shortened that delivery through the normal birth passages may be extremely hazardous, or even impossible under

any conditions. Whenever the antero-posterior diameter of the inlet, as determined by the diagonal conjugate, is 7:5 cm. or under, the child should be delivered by cesarean section. Extreme contraction of the pelvic outlet rarely occurs, but when found is an absolute indication and should be sufficient cause for early delivery by the transperitoneal route.

Relative contraction of the pelvis and cephalopelvic disproportion includes those borderline cases where the true conjugate measures 8 cm. plus. It is this type of case which needs special consideration and evaluation. Careful mensuration of the pelvis should be performed early in pregnancy so that the practitioner can forecast the potentialities of his patient. If the fetal head cannot be forced into the pelvis at the onset of good contractions and there is overriding of the symphysis pubis, cesarean section should be resorted to. If, however, the head can be forced into the inlet and there is no overriding this patient should be allowed to continue in labor in the hope that moulding will permit engagement. Trial labor should be terminated within 18 hours after the onset of labor and 6 hours after rupture of the membranes in all cases where cesarean sections are anticipated. Likewise, (vaginal and rectal examinations should be reduced to a minimum where delivery by this method is considered). Decision for cesarean section must be made early if the best results are to be obtained. Barrett remarks that, "undue prolongation of labor with inefficient uterine contractions, slow dilation of the cervix, and ruptured membranes markedly increases the risk to both mother and baby, whatever the type of eventual delivery." Deformities should be recognized early in pregnancy so that operation may be performed at the optimum time.

In outlet contraction the posterior sagittal diameter and the bi-ischial diameter are of utmost importance. Whenever the sum of these two measurements is less than 15, consultation should be held if possible. The use of x-ray is of value here in showing the acuteness of the subpubic angle, the width of the sacro-iliac notch and the character of the ischial spines.

Obstructing Tumors—Occasionally fibroids reach such mammoth proportions, or by virtue of their number and location, make delivery by the abdominal route imperative. Should the tumor be an ovarian cyst which fills the pelvis ahead of the presenting part, the patient could better tolerate delivery early by cesarean section.

Previous Cesarean Section

The dictum that once a cesarean always a cesarean does not hold in every instance. A repeat section should be done if the primary indication was one of obstruction. However, where it was originally done for an accident of pregnancy, such as placenta praevia, the patient should be given an opportunity to deliver through the natural birth passages. Such a trial of labor may be permitted if the postoperative course has been afebrile and there has been no evidence of wound infection. A woman who has had a cesarean section should be placed in a well equipped hospital at the beginning of labor in order that she may be closely observed. The classical cesarean section appears to result in a high percentage of rupture of the uterus. The low flap cesarean section does not carry the same danger.

Rapidly Progressive Toxaemias

It is widely known and accepted that toxaemias of pregnancy are best treated by conservative methods. Occasionally, in a rapidly progressive toxaemia where the patient is not responding to conservative treatment, abdominal delivery offers the best prognosis for both mother and baby. Local anaesthesia yields best results here. An equally important point, however, is that in eclampsia, cesarean section offers the **worst** prognosis. In fact, one can almost say without exception, that cesarean section is contraindicated in the treatment of eclampsia *per se*.

Hemorrhagic States

Placenta praevia, regardless of the type, may provoke such serious hemorrhage that cesarean section must be performed. Carefully matched donors should be on hand and everything in readiness for operation if indicated, before the patient is even examined. No patient should be operated upon until she has reacted from her shock through the liberal use of blood transfusion and other such methods.

Premature separation of the normally implanted placenta practically always calls for cesarean section. This is particularly true with the rigid, hard, undilated cervix. The patient will not always need an hysterectomy, but where the uterine musculature is widely infiltrated with blood, one should not hesitate to remove the organ, because it is quite likely to be the seat of further hemorrhage. The baby is dead in most instances and the operation is usually an emergency in the interest of the mother.

Rupture of the uterus is a true emergency and demands surgical intervention.

Medical Indications

In tuberculosis, nephritis, and heart disease, there is no hard and fast rule concerning the method of delivery. It is advisable to have consultation with a well qualified internist, whenever this can be obtained, before a decision is made. All factors of hand should be considered carefully. Where the patient has withstood pregnancy poorly and has not responded to conservative therapy, it is advisable to relieve her of the strain of labor. Operation should not necessarily be performed in such instances in order to sterilize the patient. If there is no other indication, sterilization can be performed at a later time with much less risk to the mother's life.

Repeated Still Birth Due to Previous Obstetrical Disaster

This may have been beyond the physician's control, or it may have been due to an error in judgment. Under such circumstances, where scrupulous analysis has proved that abdominal delivery is the best means of obtaining a live baby, I feel that operation is justifiable.

The Elderly Primipara, that is 35 years and more, should be given an opportunity to deliver *per vias naturalis*. Should she show lack of progress, or if some other indication for cesarean section be present, one should not wait too long before terminating labor. Often this patient is a sterility problem and after full term is reached, careful consideration should be given to the best type of delivery.

Previous Operations

Healed plastic operations on the pelvic floor, rectum and bladder are indications for cesarean section unless the fetus is quite small. Operations on the cervix frequently result in so much cicatrization that cervical dilation is impossible and finally the patient must be delivered from above. I wonder if we shall expect to see more cervical dystocia from the frequent use of conization of the cervix. Suspension of the uterus or operation on the adnexae are not sufficient cause for cesarean section. The Watkins interposition operation, however, may render delivery impossible except from above.

It is hard to fix binding rules in any branch of medicine. Contra-indications, like indications, are relative. From the years of experience with this operation which have preceded us, and in

the light of the carefully prepared reports appearing in literature, we can list certain contra-indications which might guide us. A few of these are:

1. Dead baby, long labor with infection. If due to marked contracted pelvis, cesarean section must be performed. The Porro operation is the procedure of choice. In normal pelvis and mild cephalopelvic disproportion with dead baby and infection, craniotomy may be performed. An ill chosen cesarean section under these conditions would probably result in the death of the mother.

2. Mild cephalo-pelvic disproportion. Do not be afraid to permit a patient to have a trial, or even the test of labor. The conservative physician who is willing to wait and to observe his patient will often be rewarded by a spontaneous delivery.

3. Fetal monstrosities in which delivery can be effected from below by craniotomy.

4. False labor or cervical dystocia as it is sometimes erroneously called.

5. Most cases of malposition of the fetus. **Occiput-posterior**, all things being equal, should hardly be indication for abdominal delivery.

6. Most cases where attempts at delivery have been made. The mortality rate in these cases approaches 30%, as is shown by Holland's report.

7. Prolonged labor with long ruptured membranes. Barrett's report from the Woman's Hospital in New York clearly points out that after the patient is exhausted, the membranes ruptured for over 24 hours, the death rate following cesarean section is triple that following the elective operation.

8. Eclampsia, as has been mentioned before, can almost always be considered a contra-indication for cesarean section. Twenty odd years ago, when it was in vogue to practice rapid evacuation of the uterus in convulsive toxæmias, the mortality rate was 40% and above. More conservative methods of treatment have demonstrated to us that cesarean section was not the solution to the eclampsia problem.

Choice of Operation

The classical cesarean section introduced by Max Sanger of Leipsig in 1882, and the low flap cesarean section, popularized by Beck and DeLee in this country, are the two operations most widely used. Comparative studies have been made and supporters from each side have good points. Since most everyone is familiar with the

classical cesarean section, let us consider a few points about the low flap operation.

Advocates for this operation believe it superior because:

1. Wound healing is better as the incision is entirely in the passive or lower uterine segment.

2. There is less likelihood of rupture of the uterus in subsequent pregnancies.

3. There is little danger of adhesions forming between the uterine and abdominal wounds.

4. The operation is performed without the intestines coming into view. Therefore, there is less danger of peritoneal contamination and ileus.

5. There is less postoperative discomfort, vomiting, and ileus following the low flap operation.

6. Infection, if it occurs and penetrates the uterine wound, will be limited to the retro-peritoneal space behind the bladder, for a time at least, before producing infection of the general peritoneal cavity.

Porro, in 1876, advocated cesarean section, followed by removal of the uterus. The adnexa are left undisturbed. This operation is still of great value in hopelessly infected cases and in some types of separation of the placenta, cancer, and fibroids. It is not as difficult technically as are certain of the extra-peritoneal operations.

Technique for the Low Flap Cesarean Section

In preparation for cesarean section, it is advisable to have the patient typed and matched for transfusion. The anaesthetic is chosen to meet the demands of the individual case. One rarely employs an inhalation anaesthetic in the presence of pulmonary or upper respiratory complications. Local anaesthesia is particularly adaptable to pulmonary conditions and in severe toxæmias. The patient should not have morphine until after the baby is delivered. The fetal heart should be counted and diagnosis of position made before the anaesthetic is begun. The patient should be catheterized. It is a good plan to leave the catheter in place until after the operation is finished. A full bladder hinders good performance of the low flap cesarean section.

The abdomen should be prepared with iodine and alcohol as for any major abdominal procedure. After proper draping, the skin incision extends from just above the symphysis pubis to just below the umbilicus. Skin towels give added protection. After the peritoneum is opened, the uterus is rotated, if necessary, to bring the

midline of this organ into the center of the abdominal wound. As the operation is performed in the lower uterine segment no packing is necessary to wall off the incision from the peritoneal cavity.

The loose fold of peritoneum between the uterus and bladder is raised and cut transversely from one broad ligament to the other. The lower flap of peritoneum is then pushed down with the bladder off the lower uterine segment. The upper leaf of peritoneum may or may not be raised. The bladder is held near the symphysis with a broad retractor.

The incision in the uterus may be midline or transverse. I prefer the transverse because the entire incision is kept in the passive uterine segment. The scalpel is used to incise the uterus, care being taken to avoid cutting the baby since the musculature in this area is quite thin. If the membranes present they may be incised and with suction the amniotic fluid is drained away. Using bandage scissors, the incision is extended laterally, curving slightly upward on each side. Pennington clamps can be used to grasp any large sinuses which may be opened.

The occiput or mouth may be brought into the incision and the head delivered by forceps. Or, by using one blade of the forceps as a vectis, delivery may be accomplished by pressure applied to the fundus. Should the breech present a foot is grasped and the child carefully extracted. The baby should be handed to an assistant experienced in the care of the newborn. This individual should understand resuscitation for sometimes the anaesthetic causes considerable respiratory embarrassment to cesarean babies.

As the baby is delivered an assistant can give ergotrate gr. 1/320 or 3 minims of pitocin in 4 cc. of normal saline intravenously. The placenta soon presents, but occasionally must be manually removed. Uterine packing seldom has to be resorted to with the use of these oxytocics.

The uterine incision is closed with interrupted No. 2 chromic cat gut sutures. A continuous Lembert suture is used to invert the first row of interrupted sutures and to approximate the thin layer of endopelvic fascia which lies between the uterus and bladder. The low flap of peritoneum is then brought up so as to cover entirely the lower uterine incision. The peritoneum is then closed with plain No. 1 cat gut, care being taken to avoid the bladder in the

suture and also to avoid puncture of the large veins laterally.

The abdomen is closed in the usual manner following inspection.

Post Operative Care

The patient should receive a hypodermoclysis of 1,000 cc. of 2½% glucose immediately upon returning to her bed. This is repeated 8 hours later. A transfusion should be given if the patient has lost more blood than usual or if she is anaemic. This procedure is of great value in combatting infection if instituted early.

Morphine is given in quantities sufficient to keep the patient free from pain.

Only sips of tap water are given for 24 hours. Clear tea and coca-cola are given on the second and third days. A modified soft diet is permitted on the fourth day.

The bladder is kept emptied by catheterization in low flap cases because of the suture line in the bladder flap. This is employed every eight hours during the first 24 hours, even if the patient voids.

Abdominal distension rarely occurs following the low flap operation, but is treated with enemas, the rectal tube, and other such methods.

Patients are permitted up on the 12th day.

In conclusion, we are aware of the high maternal mortality following cesarean section. It is hoped that we shall **not** see an increase in the number of operations performed due to more readily available surgical facilities. The most important indications and contra-indications are listed. * Indications should be restricted rather than expanded if we are to lower the maternal mortality rate in this country. Fewer unnecessary operations also will help lower this figure. By careful analysis of the case at hand and close adherence to indications, this operation can be performed at the optimum time with the best results. The technique of the low flap operation is reviewed. This operation is heartily recommended and those who do obstetrical surgery are urged to acquaint themselves with this procedure. It may be used safely after an adequate test of labor. The Porro cesarean section may be used in those individuals who are frankly infected.

Finally, let us not abuse the use of cesarean section, but by intelligent application give it the place it deserves in modern obstetrics.

PRELIMINARY PROGRAM OF NINTH TWO-DAY COURSE OF GRADUATE
INSTRUCTION, UNIVERSITY OF ARKANSAS, SCHOOL OF MEDICINE

Little Rock, Arkansas

Wednesday and Thursday, October 16 and 17, 1940

GUEST SPEAKERS

DR. J. M. T. FINNEY, JR.
Baltimore, Maryland

DR. HUBERT M. PARKER
Kansas City, Missouri

DR. G. W. REAGAN: **Newer Methods in the
Diagnosis and Treatment of Pyelonephritis.**

Infection of the kidneys is a common affliction. It may be due to any of several causes. Mandelic Acid and Sulphanilamide are new drugs useful in its treatment. They must be administered under carefully controlled conditions. Infections not responding must be due to conditions that need urological investigation.

DR. CLYDE RODGERS: **Sterility.**

Many married couples remain childless. In some the cause can be detected and corrected. The necessary steps in the investigation will be described and results reported.

DR. BARTON A. RHINEHART: **The Essentials
of Normal Nutrition.**

Proteins, carbohydrates, fats, essential amino acids, minerals, and vitamins are all necessary for normal nutrition. There are physiological needs for all these substances. These will be discussed.

DR. J. M. T. FINNEY, JR., Secretary of the Central Committee for Educational Campaign on Appendicitis of the Southern Medical Association: **Appendicitis.**

The mortality from appendicitis is on the increase. This is due to failure to recognize the disease in its early stages and to improper treatment administered by the physician, by the patient himself, or by the patient's relatives. A reduction in mortality will follow an educational campaign for physicians and lay persons. The Southern Medical Association has a special committee for this purpose of which Dr. Finney is the Secretary. An educational campaign in Arkansas will be inaugurated at the time of Dr. Finney's visit.

DR. CHARLES C. REED, JR.: **Intravenous Anesthesia With Pentothal Sodium.**

In selected operative cases a very satisfactory anesthesia can be obtained by the use of pentothal sodium. The use of this preparation will be discussed; a motion picture or a practical demonstration of its use also will be given.

DR. HUBERT M. PARKER, Kansas City, Mo.: **Calcium Therapy, Indications and Contraindications.**

Calcium in some of its chemical forms has many therapeutic uses and in some conditions it is a valuable remedy. There are also definite contraindications to its use. The subject will be fully discussed.

DR. B. A. BENNETT: **The Therapeutic Indications for the Use of Hormonal Preparations in Gynecology.**

There have been many important advances in the study of the hormonal preparations useful in gynecology. The number of different preparations that have been produced by manufacturers has led to confusion in the indications and uses of these preparations. An attempt will be made to classify the different preparations and give their therapeutic indications.

DR. J. N. COMPTON: **The Good and the Bad About Sulphanilamide and Related Drugs.**

One of the greatest advances in recent years in the treatment of infections has been through the use of sulphanilamide and other similar preparations. There are definite indications and contraindications for their use; they must be administered under controlled conditions; and they may produce undesirable results. The subject will be fully discussed.

DR. BARTON A. RHINEHART: **Fads, Fancies, and Fables About Diet.**

This will be a continuation of the discussion of nutrition given on the first day of the meeting. Some of the ideas and beliefs about diet are founded on fads, fancies, and fables that have developed over a long period of years. These have little basis in a scientific knowledge of nutrition. They will be discussed and their unscientific character exposed.

DR. J. M. T. FINNEY, JR.: **Diverticula of the Small Intestine.**

DR. HUBERT PARKER: **The Management of Symptoms in Patients Who Have Had Several Laparotomies.**

Obstinate and recurrent symptoms in patients who have had several laparotomies may be dependent upon certain unfortunate complications of surgery, or may be manifestations of an obscure disease not yet diagnosed. The management is obviously symptomatic, and methods of approach are considered. Several obscure diseases leading to the erroneous use of surgery are reviewed.

At this meeting certain refresher or review courses will be offered. These are intended to be a comprehensive review emphasizing fundamental anatomical, physiological, pathological, and clinical aspects of the subjects presented. They will be strictly informal, making use of patients and clinical case reports. There will be ample opportunity for a full and free discussion, including any cases that visiting physicians might care to have discussed. Each course will last a part or all of a four-hour period. The hours from 3:00 to 5:00 P.M. each day will be set aside for this purpose.

If there are enough physicians signing up for them, the following courses will be presented. Each group will be limited to twenty-five. Reservations will be made in the order of the receipt of the application blanks given below. Admission to the courses will be by ticket that will be mailed on receipt of the application blank. First come will be first served, so mail your application at once. Be sure to list a first, a second, and a third choice.

REFRESHER COURSES

Wednesday and Thursday

October 16 and 17, 1940, 3:00 to 5:00 P.M.

COURSE No. 1—DR. S. C. FULMER: **Physical Examinations of Patients.**

COURSE No. 2—DR. HENRY HOLLENBERG: **The Symptoms, Diagnosis, and Treatment of Acute Surgical Conditions Within the Abdomen.**

COURSE No. 3—DR. JOE F. SHUFFIELD: **Fundamentals in the Treatment of Fractures.**

COURSE No. 4—DR. E. H. WHITE AND ASSOCIATES: **Obstetrics.**

(October 16) **Bleeding in Pregnancy.**

- Placenta previa vs. premature separation of the placenta.
- Abortions.
- Tubal pregnancy (ectopic).
- Handling of the placenta at delivery.
- Post-partum bleeding.

(October 17) **Difficult Labors.**

- Normal measurements with abnormal promontory—high and low assimilations.
- Breech delivery technique.
- Versions.
- Deficient motor power of the uterus.
- Accidents in labor to the mother; to the baby.

COURSE No. 5—**Pediatrics.**

- DR. SAM PHILLIPS: **Feeding the Normal Infant During the First Year.**
- DR. J. EDWARD JONES: **Management of Premature Infant.**
- DR. V. T. WEBB: **Birth Injuries.**
- DR. IRVING SPITZBERG: **Vitamin Deficiencies.**
- DR. W. R. PARSONS: **Pneumonias in Childhood.**
- DR. B. P. BRIGGS: **Convulsions in Childhood.**

COURSE No. 6—DRS. D. A. and B. A. RHINEHART: **Roentgenographic Technique and Interpretations.**

(The phase of the subject that will be discussed will be determined by a poll of those applying for this course.)

APPLICATION BLANK TO BE FILLED OUT AND MAILED

Dr. Joe F. Shuffield, Secretary
Committee on Postgraduate Instruction
Donaghey Building
Little Rock, Arkansas

Dear Dr. Shuffield:

I hereby submit the following application for enrollment in the refresher courses to be given at the postgraduate meeting on October 16 and 17, 1940:

First choice: COURSE No. Second choice: COURSE No.

Third choice: COURSE No.

Signed:

Address

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE 36th Annual Meeting of the National Tuberculosis Association held in Cleveland June 3 to 6, 1940, was characterized by a spirit of optimism based on the confidence that the control of tuberculosis is on the way of being achieved. Delegates were reminded, however, that before the goal can be reached, certain wide gaps in the program of research, case-finding and the provision of treatment facilities, must be closed. There is as yet no specific cure, no dependable vaccine; chemotherapy offers scant encouragement, case-finding is still too haphazard and at least 60,000 more beds for the tuberculous are needed. An excellent background for the detailed discussions which took place in the various sections on these and other subjects, was sketched by Henry D. Chadwick in his Presidential address, which here appears in condensed form.

SUBJUGATION OF TUBERCULOSIS

One of the great achievements of the 20th century will be the subjugation of tuberculosis. We are far enough along in the campaign that started when the National Tuberculosis Association was organized 36 years ago to be quite certain that eventually victory will be won. We must not be too complaisant, however, as we are dealing with a very resourceful opponent who will take advantage of any weakening of our defenses to make a counter attack.

In the early days of the Association the stress was put upon treatment, later on prevention, then on health education and on case-finding—these four together with research make up the forces that under one coordinated command are now in the field doing valiant work against the disease. Much has been accomplished. The death rate has dropped 76% in 40 years. We must not be content with what has been accomplished. We have far to go before our objective is gained. Sixty thousand lives a year even now are taken by the tubercle bacillus.

The tuberculosis mortality dropped 33% and 32% respectively in the last two decades. Let us assume, therefore, this average decline of approximately one-third every 10 years can be maintained. In that event, the tuberculosis death rate would be 32 in 1950, 21 in 1960, 14 in

1970, and 40 years from now in 1980 a rate of 9 or 10 may be anticipated. The bells that ring in the year 2000 may sound the death knell of the tubercle bacillus.

The federal department of agriculture has led the way in a successful campaign to eradicate bovine tuberculosis. The success of the agriculturists is due to their persistence along one line—a direct attack on the bacillus and giving no quarter, although this involves the destruction of the host.

Our problem is more complex. We can search out the bacillus but when found we cannot destroy the carrier. We must temporize, we must educate and by slower methods of prevention try to protect others. We attempt to cure, often succeed, and so do much to limit the spread of infection. The slaughter of human beings on the pretext of affording them protection is deemed illegal, and outside of modern warfare that measure is barred. The substitute is segregation in institutions. My plea, therefore, is for more beds—one for every tuberculosis patient who should have one.

How many beds should we provide to meet this need? There are 732 institutions listed in the 1938 sanatorium directory with a capacity of 90,000 beds. This is approximately $1\frac{1}{2}$

beds per annual death. It has been shown that a minimum of two beds for each annual death are needed where a good case-finding program is carried on and well equipped institutions are available. Thirteen states have exceeded this quota and four have as many as three beds per death. Far down the list are fourteen states that have not provided even one bed per death. The tuberculosis death rates in 13 of those states exceed the average for the country as a whole. The National Tuberculosis Association through its affiliated state organizations should wage a persistent campaign for more sanatoria in these states to bring them up to the minimum standard.

The number of beds needed in a state or community can be computed quite accurately by multiplying the number of annual deaths by 10 and dividing the result by four. There are 10 active cases of tuberculosis for each death and 25% of them need and will accept institutional care. This has been the experience where good case-finding programs are carried out and well conducted institutions are available to the patients.

Applying our formula to the United States to find the number of active cases of tuberculosis, we multiply the 60,000 deaths by 10 and the result is 600,000 which is approximately correct. The 25 per cent that will accept and need hospitalization would require 150,000 beds. There are now but 90,000, which means that 60,000 more beds are needed to provide a full complement.

Many additional beds for tuberculosis patients placed where most needed should be the No. 1 item on our agenda. Health education as it applies to tuberculosis is item No. 2. So familiar to us are these matters of what ought to be common knowledge that we deceive ourselves and erroneously believe that our teaching has accomplished its purpose and that the people as a whole are well informed. We must not jeopardize our favorable position through overconfidence. With the weapons now at our command wielded by the agencies now in the field working in close harmony we may expect continued progress toward our goal.

The ultimate surrender of the tubercle bacillus, however, is two generations away unless new developments in treatment come to our aid. This may be brought about more quickly by discoveries made in the fields of chemotherapy and nutrition. Research in both of these fields is yielding rich returns.

While the chemists of various types and interests are delving in their laboratories, we plodders in the broad fields of physics and education must continue to use the methods that have proven sound and true. Yet we must be alert and responsive as new procedures are developed, change our tactics if necessary, and vary our course to keep pace with the changing times.

With all the research work being carried on, sooner or later a discovery should be made that will revolutionize the treatment of tuberculosis. I have faith that this will come to pass.

Presidential Address by Henry D. Chadwick, M. D., Thirty-sixth Annual Meeting of the National Tuberculosis Association, Cleveland, Ohio, June 3-6, 1940.

MATERIAL WANTED FOR EXHIBIT ON HISTORY OF MEDICINE IN ARKANSAS

An exhibit on the history of medicine in Arkansas is planned as a part of the Medical School Day program at the University of Arkansas School of Medicine on October 16, 1940. A replica of a physician's office typical of the 1870's is projected as well as a collection of pictures of physicians and early hospitals, books, diaries, and biographies of early Arkansas physicians, early copies of Arkansas Medical Journals and similar material.

Much of this material is available but is scattered over the state and can only be brought together through the cooperation of interested physicians. The committee will be very grateful to any physician who may have the pictures, instruments, and other material suitable for this exhibit if he will write Dr. S. P. Cromer, Dean, University of Arkansas School of Medicine, Little Rock, indicating the material he is willing to loan. The Medical School will pay for the transportation. The exhibit will be placed in the library and every effort will be made to protect this material. Fragile or especially valuable material can be placed in locked, glass cabinets.

The Medical School will be glad to receive items of historical interest for permanent display or preservation in the school and will suitably acknowledge such gifts. The preservation of these records of medical progress in the state constitutes a valuable collection for medico-historical research.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

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W. R. BROOKSHER, M. D., Editor
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Ninth District—J. F. JOHN	Eureka Springs
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EDITORIALS

THE PREPAREDNESS QUESTIONNAIRE

On September 15th, according to a postal card check, less than 42% of the physicians of Arkansas had completed and returned the preparedness questionnaires mailed them by the American Medical Association. This compares rather unfavorably with a number of the states and is lower than the country's average of 52%. It is, of course, possible that some physicians who returned the questionnaires did not return the postal cards. However, the Society is charged with the duty of securing as nearly a 100% return as is possible and failure to advise the state secretary only adds to the clerical work necessary to determine that individual physicians have responded. In a final effort to secure a hoped 100% response, a third postal card was mailed the last week in September to those physicians who have apparently failed to complete and return the questionnaire. If you have not completed the questionnaire but have it available, please do so now. If you have misplaced the form, please make request for another. The more complete the return of ques-

tionnaires, the better will the medical profession be able to determine the needs of America, both civilian and military, and the more satisfactory will be the placement of physicians in defense positions.

POSTGRADUATE STUDY

The increase in medical knowledge and its dissemination to all physicians constitutes a perplexing problem. Organized medicine has accepted the challenge of providing for the continuing education of its membership. Outlets for the distribution of the newer knowledge are the medical society, its publications, its meetings, the medical school and extension courses. Of these agencies, the greatest impetus in recent years has been accorded the so-called extension courses whether conducted as one of the clinical society meetings or as a specialized activity of the organized profession of a given section. This idea brings postgraduate medical instruction within comparatively easy reach of more practitioners than any of the other methods. Postgraduate study courses have been conducted by a special committee of this Society for four years. The programs have been well-balanced and adapted to the needs of Arkansas physicians. Attendance has failed to reach what might be considered a minimum level. This issue of The Journal contains the program for the October, 1940, session of the Postgraduate Study Course. It is hoped that the response of members will be such as to encourage the Committee in their efforts to provide continuing medical education.

That there are some—maybe millions in fact—who have not benefited under the American system is not because of the system but in spite of it. In the pursuit of our natural desire to aid the under-privileged we must not wreck the system which has produced benefits for the majority. The things which made our country great can make it greater. Free enterprise, rugged individualism, unfettered opportunity to seek improvement of every kind must be safeguarded and protected. Nothing could end the amazing career of the United States more quickly and more certainly than the abolition of the rules and practices and procedures which have made it possible for miners to become millionaires and a railsplitter to become President.

In assaying the American system we must look at the doughnut and not at the hole in the doughnut.

GEORGE A. EASTWOOD,
President of Armour and Company.

PROCEEDINGS OF SOCIETIES

The Arkansas Society of Medical Technologists was addressed September 21st at Little Rock by D. W. Goldstein, Fort Smith, "The Relation of the Serologist to the Control of Syphilis"; Fred Hames, Pine Bluff, "The Patient in Radiation Therapy," and M. J. Kilbury, Little Rock, "Evaluation of Recent Laboratory Tests." The luncheon session was addressed by S. P. Cromer, Little Rock, and the banquet session was addressed by Hollis E. Buckelew, Hot Springs National Park.

The Tenth Councilor District Medical Society met in Fayetteville, September 17th. The morning program was presented at the Veterans Facility: "Improving the Service of the General Practitioner," Thos. Douglass, Ozark; "Postpartum Hemorrhage," I. F. Jones, Fort Smith; "Vincent's Angina," J. F. Lewis, Fayetteville; "Tularemia," W. L. Carmen, Fayetteville; "Genito-urinary Cases," L. B. Andrews, Fayetteville; "X-ray and Pathology," H. H. Howze, Fayetteville, followed by ward walks. A noon luncheon session was followed by "Diabetes," S. L. Levin, Fayetteville; "Burns and Their Treatment," Ellery C. Gay, Little Rock; "Progress of the University of Arkansas School of Medicine," S. P. Cromer, Little Rock, and "What You Should Eat and Why," Lee Miller, Kansas City. Officers elected are: President, R. T. Henry, Springdale; Vice-President, C. T. Chamberlain, Fort Smith, and Secretary-Treasurer, Ruth Ellis Lesh, Fayetteville. The Society will next meet at State Sanatorium.

The Benton County Medical Society met in dinner session at Gravette, September 12th, for the following scientific program: "Trepheine," J. T. Powell, and "Benton County Health Unit," Dr. Thompson.

Geo. M. Love, Secretary.

The Sebastian County Medical Society met September 10th for the following program: "Hypertensive Retinitis," E. C. Moulton, and "Hypertensive Cardio-Vascular-Renal Disease," C. H. Finney, Fort Smith. W. F. Adams was elected secretary, succeeding R. E. Weddington, who has moved to Melbourne.

The Mississippi County Medical Society was addressed at Blytheville, September 3rd, by T.

D. Moore, "Use and Abuse of Urinary Antiseptics," and C. H. Sanford, "Management of the Aged Patient," both speakers of Memphis.

The Sevier County Medical Society met September 10th at DeQueen for the following program: "The University of Arkansas School of Medicine," Stuart P. Cromer, "Fractures of the Wrist and Ankle," Jos. F. Shuffield; "Chronic Cough Hemoptysis," Paul L. Mahoney, and "Pathology," E. Lloyd Wilbur, all speakers of Little Rock.

J. S. Hendricks, Secretary.

The Pulaski County Medical Society met September 16th with S. C. Fulmer presenting the scientific subject: "Nephritis."

E. H. White, Secretary.

RESOLUTION

Whereas it has pleased almighty God to remove from our midst our beloved friend and co-worker, Dr. Franklin P. Vines;

Whereas, Dr. Vines was a native of Union County, and his deep interest in its citizens and for the things pertaining to the welfare and health was well known to us all.

Dr. Vines was beloved by all physicians and was held in high repute by them. He was an active member of the staff of Warner Brown Hospital, a member of Union County Medical Society, the American Medical Association, and was ever found on the side of organized medicine, attempting to do his best for all. He was ethical in all his dealings. And, Whereas, Dr. Vines' passing is an irreparable loss to this community, to his friends and to organized medicine. His ministrations to the less fortunate will be missed sorely by many not known by us.

Now, therefore, be it resolved, That we express to his beloved widow, sorrowing relatives and friends our deep regrets and sincere sympathies and assure them that we grieve with them in their irreparable loss, and with them we bow our head in humble submission to the will of an all-wise and all-powerful God who does all things for the best.

Respectfully submitted,

Union County Medical Society
F. O. Mahoney, Chairman,
S. J. McGraw,
M. V. Russell,

Committee.

PERSONALS AND NEWS ITEMS

Hoyt R. Allen, Little Rock, spent an August vacation in Colorado.

Dr. and Mrs. M. J. Kilbury, Little Rock, spent an August vacation in Colorado.

J. L. Kellum, Fort Smith, spent an August vacation in Mississippi.

Dr. and Mrs. S. J. Wolfermann, Fort Smith, spent a September vacation in Colorado.

Ralph E. Weddington, formerly of Fort Smith, has accepted appointment as medical director of district number seventeen with headquarters at Melbourne.

H. E. Murry has been elected surgeon of the Texarkana post of the American Legion.

C. McA. Wassell, formerly of St. Charles, has returned to active duty with the U. S. Navy Medical Corps and is stationed at Key West, Florida.

J. D. Riley, State Sanatorium, recently addressed the Van Buren Rotary Club.

D. T. Hyatt, Little Rock, has been elected a Fellow of the American College of Chest Physicians.

Dr. and Mrs. S. A. Thompson, Camden, spent an August vacation at Pensacola and other Gulf Coast points.

Dr. and Mrs. H. E. Murry, Texarkana, spent an August vacation in New Orleans, Florida and east coast states.

J. O. Boydstone, Hot Springs National Park, has entered active service as Captain, Medical Corps, United States Army, and has been assigned at Fort Benning, Georgia.

Jerome S. Levy, Little Rock, spent an August vacation in Wisconsin.

The following attended maneuvers of the Arkansas National Guard in Minnesota during August: Majors Howell M. Brewer, Hot Springs National Park; Stanley M. Gates, Monticello, and Fount Richardson, Fayetteville; Captains H. C. Brooke, Conway; L. M. Henry, Fort Smith; N. C. Hodge, Marianna; T. J. Raney, Little Rock, and P. E. Thomas, Little Rock, and 1st Lieutenants Friedman Sisco, Springdale; Jett Scott, Hot Springs National Park, and Paul Hoover, Little Rock.

G. W. Reagan, Little Rock, was on active duty with the U. S. Navy Medical Corps as a Lieutenant-Commander during September.

A. S. L. Clarke, Ozark, addressed the Van Buren Lions Club recently on "Epidemics."

F. J. Scully recently addressed the Rotary Club of Hot Springs National Park on "Rheumatism."

R. E. Schirmer, formerly health director in Mississippi County, is taking training at the United States Public Health Service clinic in Hot Springs National Park.

Fount Richardson and Jack Butt have been appointed to the health service staff of the University of Arkansas at Fayetteville.

The following have been elected post surgeons of the American Legion: P. H. Phillips, Ashdown; O. J. T. Johnston, Batesville; W. H. Abington, Beebe; J. H. Hoyt, Dardanelle; E. Baker, Dermott; D. E. White, El Dorado; J. S. Southard, Fort Smith; J. W. Butts and Geo. R. Storm, Helena; E. J. Horner, Jonesboro; J. L. Bean, Lincoln; Irving Spitzberg, Little Rock; H. G. Heller, Mena; O. A. Jamison, Newport; Guy Hodges, Rogers; Rex Williams, Siloam Springs, and L. E. Ellison, Warren.

W. J. Hunt has been elected second vice-commander of the American Legion post at Warren.

T. E. Rhine has been elected first vice-commander of the American Legion post at Fordyce.

B. H. Hawkins has opened a hospital at Mena.

Dr. and Mrs. Hugh Johnson, Fort Smith, spent an August vacation in Hot Springs National Park.

The following appeared on the program of the Tri-State Medical Society, Marshall, Texas, September 25th and 26th: William Hibbitts, Texarkana, "Response to Address of Welcome"; George W. Parson, Texarkana, "Interesting Cases of Tularemia"; S. C. Fulmer, Little Rock, "The Diagnosis of Heart Disease," and Jos. B. Wharton, Jr., El Dorado, "Pontocaine in Spinal Anesthesia."

Dr. and Mrs. J. Murry Smith, Smackover, spent an August vacation on the Gulf Coast.

Dr. and Mrs. A. S. Buchanan, Prescott, spent an August vacation on Lake Catherine.

M. S. Craig, Batesville, is recovering from an operation on his knee.

E. M. Nixon has been appointed director of the Mississippi County Health Unit with headquarters at Blytheville.

Fred W. Harris recently addressed the Little Rock Kiwanis Club on "Your Heart—What to Do About It."

Paul Gray has joined the staff of Dr. Gray's Hospital at Batesville.

G. H. Landers has been appointed health director for Independence county.

Announcement has been made that Medical School Day will be held at the University of Arkansas School of Medicine, October 16th. All members of the Society are invited to attend.

OBITUARY

HERMANN J. G. KOOBS, aged 71, died at his home in Rogers, September 3rd, after a short illness. Born in Friesland, Germany, October 17th, 1868, he became an orphan shortly after birth and was reared by relatives until he came to the United States in 1885. He first became a pharmacist, later a jeweler. On August 31st, 1890, he was married to Miss Mae Donnan of Paulina, Iowa, who with a son, survives him. He graduated from the Northwestern University School of Medicine in 1902 and located for practice in Scotland, South Dakota, where he was an active member of organized medicine, serving as president of the South Dakota Medical Society in addition to county and district offices. Subsequently he took special work in eye, ear, nose and throat in the larger centers and confined his practice to this field for the past 25 years. Because of asthma he moved to Rogers in 1922 where he became active on the affairs of the community, an elder in the Presbyterian Church, a member of the Rotary Club and of the various Masonic bodies. He was a member of the American Academy of Ophthalmology and Otolaryngology and a fellow of the American Medical Association in addition to his membership in the Benton County Medical Society and the Arkansas Medical Society.

EDWARD E. CARTER, age 64, died at his home in Arkadelphia, August 7th. A graduate of the Gate City Medical College in 1905, he practiced at Hollywood and Gurdon before finally locating in Arkadelphia. In addition to his memberships in the Clark County Medical Society and the Arkansas Medical Society, he was a member and steward of the Methodist Church. He is survived by his wife.

ALUMNI BANQUET

Announcement is made that the Alumni Association of the University of Arkansas School of Medicine will hold a banquet at the Albert Pike Hotel, Little Rock, October 16th at 6:30 P. M.

RANDOM THOUGHTS OF THE SECRETARY

August 21st. The Foltz's with Bachelor Wolfermann come to dinner and many is the good tale told as the trials of the day are readily forgotten.

August 22nd. With the Chamberlains for dinner at Burns Gables, the mantle of fall beginning to drape the air at this hillside spot. This night is one of mid-October, most pleasing to us as an advance presentation of the most glorious season of the Ozarks.

August 25th. Whiling the afternoon away on Lake Weddington's comfortably warm beach, in the water only as the result of unrelenting pressure from the youngster, generally complacent over the affairs of life. Through Fayetteville where, from the shadows of the barbecue stand, we see Alfred Hathcock returning from a busy afternoon, just as professional as are all his Sunday afternoons. Observing, too, for the first time in our lifetime of interest in firewagons, firetrucks and the like, a modern fire-fighting unit, headed for Hope, and built, astounding innovation as it is, with a cab to shelter the driver and firemen from the elements. Thus departs some of the romance of fire-fighting, blurred pictures of which flicker by as we see the dashing firemen slide down the pole, grab the rear end of the truck as it goes out the door, climbing into clothes as the truck careens down the street, totally disregarding the rain or snow as it falls on these boyish heroes of smoke and flame. A cab! Indeed, what softies!

August 30th. With Amis as a traveling companion we attend a preparedness conference in Grayson's office presumably to suggest the names of physicians for draft boards. That the governor had seen fit to previously appoint 72 out of a possible 94, among these being two over 75 years of age and one not engaged in the practice of medicine, and that recommendations made as a result of the hardest three hours of conferring we have ever had, were generally ignored by the appointive authority, the governor, is one of these things associated with politics greatly to our disgust. If our recommendations were wanted, well and good; if not, why go through the motions and cause us the loss of time and trouble? An added complication was the tourist greeting adopted by Little Rock's motor cops, who now cruise their beats out Arch Street Pike with women companions, a couple stopping Bob Robins, enriching the police court toll ten dollars but adding naught to Bob's respect for the city's treatment of country boys. Now that the natty chief is going into uniform, we suggest that he take a turn about and see what his youthful motor cops consider the proper manner to patrol a beat.

September 3rd. The Chamberlains dine us with Kimball of Consolidated Edison's medical plan as honor guest and we learn first hand of the workings of one of the oldest company aid systems in the United States. Plying the New Yorker with questions we find that the plan has much of undoubted merit and restricts free choice far less than any other similar plan of which we have knowledge.

September 4th. At long last, again invited to the staff luncheon of the Holt-Krock Clinic, amusedly tolerant of the heckling which our huge plate of sandwiches brings, being smugly aware that countless guests to this luncheon in the years to come will enjoy liberal servings solely because we dared to criticize the niggardly portion once served us.

September 5th. In perhaps a final visit, the family disports in the deserted Lake Fort Smith pool until, with the coming of dusk, we drive further up the high-

way, keenly alive to the joys of a foretaste of winter in the hills tonight, when oldsters are blessed with youngster's appetites.

September 14th. Today marks one week of abstinence from tobacco, frankly an experiment on our part with so little of difficulty in severance of the habit that we feel little of credit is due us. However, if we survive what must be the mounting annoyance of our colleagues who are forced to listen to our exploit, and if we continue the experiment; for once, we shall be in proper form to attend a banquet of the non-smoking Ninth Councilor District, and will we heckle Councilor John?

September 17th. Fayetteville takes care of the Tenth Councilor District session in a handy fashion. Arriving at luncheon, we receive considerable ribbing from Hathcock on sacral fractures and from Foltz and Richardson on Willkie. The Washington serves one of its good luncheons, and the afternoon program is worthy of special commendation. To close the session, we make about seven motions, finally inducing Friedman Sisco to second one. Linger for postmortems, the better half stocks up on good Bob White pastry, and then down the highway, renewing acquaintance with G-man Doug Smith, transferred to Arkansas after many years of absence.

PREPAREDNESS QUESTIONNAIRES

Dear Dr. Brooksher:

You have no doubt read the last issue of the A. M. A. Journal and noticed the standing of the various states with reference to the return of the questionnaires. It is particularly gratifying to me to note that the Seventh Corps area contains the high five of all the states in the Union in the following order: Nebraska, Minnesota, South Dakota, North Dakota and Iowa. In our own Corps area the three remaining states follow in this order: Kansas, Missouri and Arkansas.

I notice that most of the southern states are falling a little low and that Arkansas is above the average. I appreciate the good work you are doing and hope that you can devise some method of stimulating returns so that Arkansas may lead all the southern states. The excellent job you are doing is reflected in the returns which show the Seventh Army Corps Area to have a 55.2% return which is 11.3% above the average for the United States.

Nebraska is starting to bear down on the county medical secretaries this week. They have already had a number of personal letters written to them by the state chairman and the executive secretary of the State Medical Association and we anticipate that the returns will be practically complete—or at least 90%—which is about all we can hope for within another three weeks.

Bear down on the boys and let's see Arkansas' percentage jump!

R. W. FOUTS, M. D.,

Committeeman, Seventh Corps Area.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

WHAT AN AUXILIARY MEMBER SHOULD KNOW

1. Understand the purpose and objective of her Auxiliary.
2. Receive the particular charge given by local, state, national Auxiliaries.
3. Receive instruction in how to fulfill that charge.
4. Become informed about:
 - a. Personal and community hygiene.
 - b. Administration of local, state, national health.
 - c. Medical and health laws, local, state, national.
 - d. The health of her community.
 - e. Communicable diseases; their prevention and control.
 - f. Her health in relation to her community.
 - g. General problems of health all should know.
 - h. Approved educational material; where to obtain it.
 - i. The development of the Medical Arts.
 - j. Why the A. M. A. urges the promotion of Hygeia; how done.
 - k. What legislation the Medical Association sponsors; why; how the Auxiliary acts as a reserve force; what the individual may do.
 - l. Philanthropic work related to the medical profession; service by her Auxiliary; what her Auxiliary is doing; why.
 - m. What lay organizations are doing in her community in health.

HOW DOES A MEMBER SUPPORT HER AUXILIARY?

By:

1. Paying dues.
2. Attending meetings.
3. Accepting offices, and chairmanships in other organizations, especially those related in health, so
 - a. Informed speakers may address them.
 - b. Approved material may be given.
 - c. Programs and projects to be undertaken shall be scientifically sound.
 - d. So she may keep informed about medical matters and activities in other organizations.
 - e. Report to her President and Society, programs and projects which are unwise and unacceptable; report to be made through Advisers.
4. Promoting good fellowship by affability at meetings, and by attendance at entertainments and conventions; by assisting as requested.
5. By fulfilling the charges given through Advisers.

"HYGEIA FOR ARKANSAS"

Hygeia has served to make the public conscious of the noble work that physicians are doing to make the people well and keep them well.

Physicians and their wives are elated over the cooperation accorded them by educational institutions, parent-teachers associations, public libraries and civic organizations in subscribing for and distributing Hygeia, this making it possible for a large number of non-subscribers to obtain it and learn the valuable lessons it teaches.

As Hygeia Chairman let me stress and urge that each Auxiliary use this as their slogan, "Every Member a

Subscriber," also send gift subscriptions to people unfortunate in not receiving this fine magazine.

May I ask that each county Hygeia chairman keep in touch with me each month, and keep Hygeia in doctors' and dentists' offices, in schools, public libraries, and beauty parlors.

The American Medical Association is offering three cash prizes to state Auxiliaries this year, so it is to the advantage of every Hygeia Officer to put forth increased effort in this contest. PLEASE MAKE ARKANSAS WIN!

MRS. RALPH CROSS,
Hygeia Chairman.

Dear Auxiliary Members:

September 26, 1940, is the date for first board meeting of the year. The place is Albert Pike Hotel at Little Rock. The time is 9:30 a. m. Please come and bring as many members from your Auxiliary as possible.

Let us study to know more about Auxiliary activities, thus increasing our interest and desire to serve. Service through knowledge in Auxiliary program means growth.

MARY LOUISE HATHCOCK,
President.

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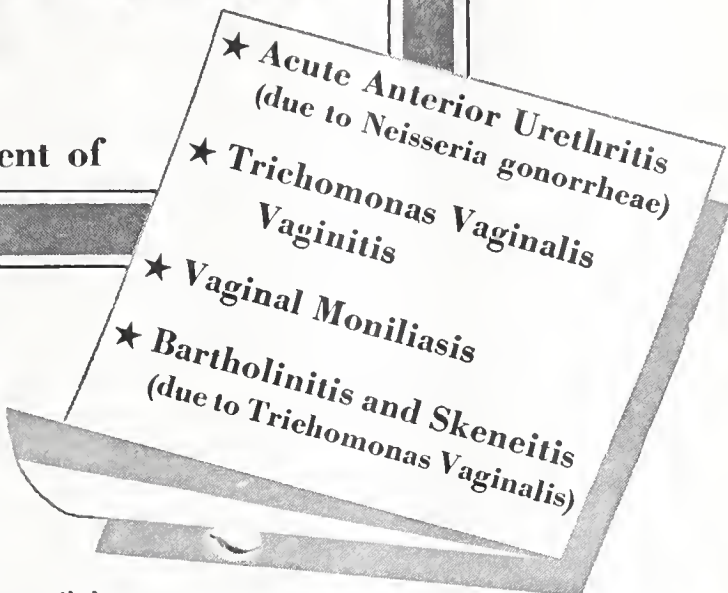
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BOOK REVIEWS

Simplified Diabetic Manual. By Abraham Ruddy, M. D., Associate Physician and Chief of the Diabetic Clinic, Beth Israel Hospital, Boston; Instructor in Medicine, Tufts College Medical School, etc. Pp. 216. Price \$2.00. New York: M. Barrows and Company, 1940. .

Part One deals with the fundamentals of diabetes, the laboratory, insulin, marriages, pregnancies, complications and personal hygiene, in a concise, understanding manner. Part Two deals with weights, the uses of various foods, vitamins, International variation in diet, suggestions for holidays, recipes, and the mineral and vitamin content of common foods. One of the outstanding features of this volume is the variation of the International diet and recipes.

A Textbook of Medicine: By American Authors; Edited by Russell L. Cecil, A. B., M. D., Sc. D., Professor of Clinical Medicine, Cornell University Medical College; Associate Attending Physician, New York and Bellevue Hospitals, New York City; Associate Editor for Diseases of the Nervous System. Foster Kennedy, M. D., F. R. S. E., Professor of Clinical Neurology, Cornell University Medical College; Attending Physician, New York Hospital; Visiting Physician in Charge, Neurological Service, Bellevue Hospital; Consulting Physician, New York Neurological Institute. Fifth Edition. Revised and entirely reset. 1,744 pages with 173 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$9.50.

This text continues in the great favor it well deserves. Non-essentials have been well excluded and this one-volume treatise covers modern medical practice in a commendable manner.

Getting Ready to Be a Mother: By Carolyn Van Blarcom, R. N. Revised by Hazel Corbin, R. N. Fourth edition. 190 pages. Price, \$2.50. New York: The Macmillan Company, 1940.

Here is a book which many doctors will find of great assistance in augmenting their instructions to the obstetric patient. Miss Corbin has prepared this small volume with a great deal of thought for mothers. The section on anatomy and physiology may not interest many readers but those with a certain inquisitiveness will find a most satisfactory explanation of reproduction. The numerous illustrations and diagrams are not complicated and have a definite appeal. The author through her affiliation with the Maternity Center in New York has a good grasp of the problems which arise in the mother's mind. The material as a whole is presented as narration so that the reader feels as if she is talking to

an experienced friend. It is thoroughly enjoyable reading.

Such important topics as prenatal care, diet, preparation of the nursery, baby clothes, and infant care during the first year are discussed. The patient is given a great deal of reassurance in the most pleasant sort of way and is frequently admonished to see her doctor in the event that something arises which she does not understand. There is not the frightening tone which has appeared in so many of the previous works, but that of success and happiness which is sure to follow with good care.

In the end problems that arise in infant care are briefly but thoroughly discussed. This is the sort of book that the physician would do well to recommend to the expectant mother. The companion book, "Getting Ready to Be a Father" warrants investigation by those who are not already acquainted with this splendid work.

Diabetes: By Edward L. Bortz, A. B., M. D., F. A. C. P., Associate Professor of Medicine, Graduate School of Medicine, University of Pennsylvania; Chief of Medical Service, the Lankenau Hospital, Philadelphia. With a foreword by Geo. Morris Piersol, B. S., M. D., F. A. C. P., Professor of Medicine, Graduate School of Medicine, University of Pennsylvania. 2nd edition. Pp. 296. Price \$2.50. Philadelphia: F. A. Davis Company, 1940.

This is a very interesting book on diabetes. The foreword by Dr. Geo. Morris Piersol gives an excellent resume of the book. The high carbohydrate diet is the way the diets are calculated. The measuring of the diet rather than weighing it appeals to the patient, and he does not have to carry a pair of scales around with him. This book is more for the diabetic patient than it is for the physician.

COMING MEDICAL MEETINGS

Kansas City Southwest Clinical Society, Kansas City, September 30th-October 3rd, 1940.

First Councilor District Medical Society, Osceola, October 2nd, 1940.

Fifth Councilor District Medical Society, Camden, October 10th.

Post graduate Course, Arkansas Medical Society, Little Rock, October 16th and 17th.

Oklahoma City Clinical Society, Oklahoma City, October 28-31st, 1940.

Arkansas Medical Society, Little Rock, April 14-16th, 1941.

American Medical Association, Cleveland, June 2-6th, 1941.

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MEDICAL EDUCATION IN THE UNITED STATES 1934-1939 *

S. P. CROMER, M. D.
Little Rock

In a foreword to the report, Dr. Ray Lyman Wilbur states: "American medicine is assuming more and more a position of leadership and distinction in the world. A decline in the quality of medical education in many European countries has increased the responsibility of our medical schools to keep medical education abreast of the rapid advances in the knowledge applicable to medicine."

During the academic years 1934-1935 and 1935-1936, Dr. Herman G. Weiskotten, Dean of Syracuse University College of Medicine, together with members of the Council, visited eighty-nine schools in the United States and Canada. Ten were Canadian medical schools, included at their own request; two were unapproved and seventy-seven were approved medical schools in the United States. There were sixty-six approved four-year medical schools in the list.

From this material the report, which is the subject of this review, was obtained.

Since the Council on Medical Education has undertaken its work as an inspecting agency and especially since the Flexner Report in 1910, there has been a marked tendency for medical schools to become part of universities. In this respect the American pattern resembles the German form of medical school and presents certain noteworthy contrasts to the English pattern.

The University of Arkansas School of Medicine became affiliated with the University in 1911. Thus, it is one of the twenty-one state owned universities. Ten other states support in part medical education.

The control of the University of Arkansas by the Board of Trustees is that which is found most commonly, and also the relation between the president of the university and the dean of the

medical school is the one most commonly found, namely, that the responsibility for the operation of the medical school very largely rests with the dean. As would be expected, there is a minimum amount of direct benefit that the medical school can obtain from the faculty of the state university or that the state university might obtain from the faculty of the medical school, due to the two hundred miles separating the two institutions.

As to the financial support for the university and the medical school, Arkansas is in a class almost of its own since the medical school seeks a budget independent of the university at Fayetteville. In every other state supported school, so far as is known, the state university receives an appropriation from the legislature and then allots a proportion to their respective medical schools. The cost per student in the arts schools usually runs below \$500.00 per year while the cost per student in medical schools averages nearly \$900.00. Arkansas averages about \$750.00.

School for Laboratory Technicians

The school for laboratory technicians is approved and has four students in it now. Our limit is six. Due to the need of technicians in this state, graduates of this school are in considerable demand.

School for Nurses

Although the University Hospital employs graduate nurses only, still there are many nursing problems which probably will be solved only when a training school at the University Hospital is established. In order to establish such a nurses' training school, a nurses' home would have to be built.

Administrative and Instructional Personnel

In the sixty-six four year medical schools, sixty-one deans have medical degrees. Four of the deans hold no medical degree and in one school there was no official who might be considered comparable to the dean.

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 15, 1940.

As to the functions of the dean, the report devotes three and one-half pages, and from personal experience your speaker could almost add another three and one-half pages. He is a university official. He keeps the president of the university and the board of trustees informed. He is responsible for selections and promotions of the faculty members, for finances and in part, at least, for the admission of medical students. He has many contacts with the laity, and, according to reports, is expected to have some contact with the Legislature. These are only a few of the functions. One of the most important functions at the present time is the development of team work in the faculty. No phase of faculty administration can approach in importance that of faculty competence. It is equally true, however, that no phase is less susceptible of general or statistical treatment. Faculty competence enters into every aspect of school excellence.

In the University of Arkansas School of Medicine it is the intent of the dean that heads of the departments will be given not alone responsibility but authority for the administration of their respective departments.

Since Little Rock is somewhat removed from medical centers, attendance at scientific meetings is encouraged and as far as possible will be subsidized. At the present time the University of Arkansas School of Medicine is given about as much for travel allowance as the average medical school although exact figures on this were not available.

Student Administration

The importance of careful selection of students for medicine can scarcely be overstated. In the past there has not been a sufficient number of Arkansas residents applying for admission to allow selection.

However, the trend is favorable. Five years ago, I am told, there were 48% of the students from outside of the state while for this year 19½% came from outside the state. The fact that nine doctors now have told me that they are planning to send their sons to Little Rock who previously had planned to send them to schools outside the state appears to be a healthy trend. The number of applicants interviewed so far this year is a few more than usual for this time of the year. If this trend is held, Arkansas will have enough applicants to allow for more careful selection of its students. The policy of the school is to choose applicants from neighboring states rather than from distant states.

Students with two years' premedical training throughout the country averaged 16.7%, while

Arkansas had 47%; 29.5% throughout the country had three years' training, while Arkansas had 26.5%; 53.8% throughout the country had four years' training, while Arkansas had 26.5%.

Although nearly all schools require a "C" average for admission, Arkansas still admits students who have any passing grade. In general it can be stated that the trend in premedical education is going away from the scientific background to the more cultural subjects. The thing behind this probably is that individuals with a cultural background will be able to take their place in society a little better than those with a strictly scientific background.

It has not been possible to provide health service for the student body this year, but plans are under consideration for meeting this need next year.

As to the curriculum each department is responsible. Actual number of hours spent by the student does not mean much. The actual education given by a professor oft times depends more on his individual ability rather than upon the number of hours spent by the students. In clock hours the curriculum at the University of Arkansas School of Medicine follows rather closely the median of the ten best medical schools.

Library

If a medical school were to be represented by a single criterion, the library might well serve. It reflects the scientific interest of the faculty and the extent to which it is used measures the interest of the students in their study of medicine. A few of the better known libraries received almost as much assistance from sources outside as from within the medical school. It was also significant that in those regions of the country best supplied with medical library facilities practicing physicians made greater demands upon packaged services, such as that offered by the American Medical Association. The readily accessible centrally located medical library such as is found in the University of Arkansas School of Medicine was generally considered most desirable.

The seating capacity of the library at Little Rock is fifty-nine. There are 13,224 books while the median for the the country as a whole is 20,000. The median number of journals received for four year schools is 272, while at Little Rock there is received 227. There is a shortage of stack space and a number of the more valuable journals do not have complete files. Steps are being taken gradually to complete these files.

The needs for the library at Little Rock include the following: first, more books; second, a larger

number of periodicals; and third, rooms where students or members of the faculty may work undisturbed. Although the above gives the picture of the physical needs of the library, there is another need which is more tangible, that is, the need of greater use by the students and some members of the faculty and possibly also by the doctors of the state. If a way can be found whereby the medical library could more adequately serve the doctors of this state, the question is raised as to whether or not the Arkansas Medical Society would help support it. There is some indication that interested laymen would help in raising funds for such a library. I believe that it is desirable to find some means by which each of the doctors in this state could feel that he had at least some small specific interest in the medical school and might receive a definite benefit from it, such as package library or a place to spend profitably a few leisure hours when in Little Rock.

It is reported that the use of the library by the students has been increased this year. The median for the four year medical schools was reported to be 65.7 visits per student during a year, while Arkansas had 60.3 visits per student.

The budget for the library this year amounted to a little over half the median budget for the four year medical schools.

Clinical Facilities

The clinical facilities available for the use of the medical school this year include the University Hospital, which is averaging at this time about one hundred and seventy patients a day. The Baptist State Hospital as well as St. Vincent's infirmary are regularly taking care of surgical, obstetrical and gynecological sections. The State Hospital is supplying psychiatric needs. It is expected that increased use of these other hospitals will be made. The greatest difficulty is found in supplying clinical teachers who have had an adequate supply of patients for instructing the students in these various branches at a time when the students can get there.

Remodeling in progress at the medical school will provide for nearly 300 beds at that institution. The need of these clinical beds was probably greater than any other need for the school at Little Rock. This need will be met at least in a minimum way if the present plans are allowed to continue.

Here I would like to express appreciation to the doctors of Arkansas for their cooperation in sending to Little Rock, for the most part, those cases which fitted into the educational program. May we suggest the desirability of holding down to the lowest possible figure the

census of the hospital during the summer months so that much needed equipment and remodeling can be accomplished. It is only through these means that satisfactory hospital facilities can be supplied at the present time.

Arkansas, in the report put out by the Council, had the smallest number of beds per student available in any of the four year medical schools. According to the report in this review there were four and one-half beds per student. According to present indications there should be available many more beds for use of students than was indicated in this report. In fact it is entirely possible that there can be made available eight or nine beds per student in the third and fourth year classes. The median number of beds for all medical schools is 10.4 per student. The average number of patients admitted per third and fourth year student was forty-eight for the country. Although much higher than ever previously available, the number of patients admitted to the University Hospital this year will average about twenty-four per student. With more efficient handling of the patients in the University Hospital, the number of patients admitted per third and fourth year student can be somewhat increased.

Financial Administration

As to the tuition paid by the students, it is \$275.00 for residents and \$500.00 for non-residents. This is about the average for the class of schools we would like to be in. The total revenue from the student body is approximately 20% of the total spent on the medical school and hospital while it is about 38% of the amount spent for the medical school itself. This is a higher percentage from student sources than the average medical school spends. In general it may be said that the University of Arkansas School of Medicine is trying to do now with \$1.00 what practically every other medical school in the class we hope to be is spending \$2.00, when hospital costs are included.

The business administration of the school is efficient. Economies are being effected on every hand. The business men of the state have cooperated in saving the school money. For example, there will be a saving of approximately \$2,000.00 on utilities alone this year. One wholesaler is giving his price to the medical school and not charging any profit. Many bids are coming in lower than ever before.

In spite of this the cost of almost completely equipping the hospital as well as remodeling and some new construction work has thrown a great strain on the budget this year, and this will probably continue throughout the coming year.

Many activities which should be carried on by both the school and hospital are being curtailed until such time when necessary equipment and facilities are available. Outstanding in this line is the almost negligible amount of money spent on research.

The report gives a careful analysis on the six preclinical and four clinical departments, in every case indicating the average number of hours spent in instruction, laboratory work, the number of instructors in every department, discussions of the methods of approach in the teaching, that is, whether it is static or dynamic. Possibly, it would be clearer if we stated whether it was from books or from animals and patients. The amount spent per student in each of the departments is indicated.

Briefly, the preclinical departments at Little Rock average up to most of these standards fairly well except for the lack of adequate personnel. In other words, the number of students per instructor is a little too high. Due largely to an increased amount of personal attention to freshmen the number of conditions, failures or withdrawals will be decreased from 30% to approximately 12%. We have the feeling that if we accept the student's time and money, the institution owes him every opportunity to pass the courses.

Salaries paid in the preclinical departments are still lower than the average. Employing full time men in the clinical departments is the plan followed in nearly all the four year medical schools and has solved many of the most pressing teaching problems here but has created other problems, particularly involving the development of team work among the part time clinical men in the city.

It is not possible to compute the value of the time and service rendered by the practicing physicians who teach in the medical school. Without them it would not be possible to operate a good medical school in any section of the country, and Little Rock is no exception.

The junior class, in particular, has had more work to do this year—so much so, that many of them complained that they had to work as hard as the freshmen. It is our hope that we shall be able to step up the requirements for work on the part of the seniors next year. However, both junior and senior classes indicated that they are working harder this year than previously. The student body on the whole, however, is well pleased and their attitude is very satisfactory. Although many serious problems still face the medical school, we feel that the present year has been one of definite progress.

THE DIAGNOSIS AND TREATMENT OF ECTOPIC PREGNANCY *

BERRY L. MOORE, M. D.
El Dorado

When ectopic pregnancy is mentioned, one usually thinks of a near tragedy. It is quite serious sometimes, but there are many cases that are diagnosed late who have suffered little ill effects except some pain in the lower abdomen. The diagnosis is not usually difficult but may be overlooked. Diagnosis before rupture is rare.

The classical picture of sudden severe pain in the lower abdomen with collapse in an apparently healthy woman, who has missed a menstrual period, offers little difficulty in diagnosis. We see these cases very rarely.

The ones most commonly encountered are those who have had a slow rupture and have had no severe pain or shock. The history in these cases is very important. The symptoms are many, but most of them complain of the following: (1) Pain in the lower abdomen, not so severe but enough so that they usually take an aspirin or some other sedative, (2) A missed menstrual period or irregular vaginal bleeding, and (3) Headaches, dizziness and weakness, or backache. In the history we usually find that they have had some previous pelvic infection or operation.

The pelvic findings vary a great deal. There may be a mass in the culdesac or in the adnexal region. A doughy mass in the posterior culdesac with the above symptomology is usually pathogonic. A mass in the region of an ovary might cause some difficulty, however most cystic ovaries are movable and not very tender. Soft myomata do not usually cause any pain nor are they tender. Pelvic inflammation is usually accompanied by marked tenderness over the entire abdomen and high fever. Incomplete abortion is usually accompanied by profuse hemorrhage with clot formation and there is a rhythmic contraction of the uterus. In ectopic pregnancy the bleeding is usually slight in amount and the pain is not rhythmic.

The blood count and blood pressure readings are of little value in ectopic gestation. The Friedman test is of little value. It does not tell you if the pregnancy is extra-uterine, while if the fetus is dead, the test will be negative.

The treatment is surgery in all cases. Delay is sometimes necessary until a transfusion can be

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

given. This delay may be overcome in the near future by the use of blood serum.

In most cases it is very simple to open the abdomen and remove a small mass in either adnexal region, but sometimes there is the old case in which the placental tissue is attached to the descending colon or a wide area of the small intestine. The problem here is one that baffles some of us. Should one try to dissect all of this tissue away from the intestine? My opinion is that there is too great a risk in trying to remove it. There is the possibility of perforating the intestine, then, too, one leaves a large raw surface that cannot be covered and a mass of adhesions will be formed and possibly an intestinal obstruction.

I believe the best method is to remove that part of the sac that is most accessible and leave the rest. Where this is done I always leave two tissue drains in place for three or four days.

I have collected a series of ten cases in the past two years. There was only one patient who was in profound shock on admission to the hospital. I gave her saline and glucose until a donor was available for transfusion. She improved so much in four days that I thought my diagnosis was wrong and allowed her to go home. There was no mass in the pelvis, temperature and pulse were normal, and she wanted to go home. She returned in three weeks and a well-encapsulated left ectopic pregnancy was removed.

There were two colored patients in the series. One was seen by another physician the week before and was told that she had salpingitis. When I first saw her the abdomen was slightly distended and she was complaining of pain in the lower abdomen. There was a history of a delay in her menstrual period of two weeks and then slight vaginal bleeding. Vaginal examination revealed a slight bulging in the culdesac with slight enlargement of the uterus. Laparotomy revealed a right ectopic pregnancy.

There was one widow and one single patient in the series. This offered quite a little difficulty. One preoperative diagnosis was a cystic ovary, but operation revealed an old ectopic pregnancy.

I have not had a single death in my cases. However, the general mortality rate is low. I found the rate to be from one to eleven per cent, with most series it was one and two per cent.

RESOLUTION

On The Death of Dr. J. T. Altman

God has called him and his work here is finished.

It is with deepest sorrow we mourn the loss of our dear friend and member of the Craighead-Poinsett County Medical Society.

He dedicated his life to that which seemed nearest his heart. His heart was in his work.

When we heard of his death we realized and knew he had spent his life in service, for it mattered not when he was called, he went about doing good and only when he was called up higher did he lay down his work.

His service is ended. He spent his life in helping humanity and the man who does that most surely will have his reward in the hereafter.

WHEREFORE, BE IT RESOLVED, that in the passing of Dr. J. T. Altman, this society has lost one of its most valuable and lovable members, whose conduct and ethics were always in accord with the medical profession.

Be it further resolved that the secretary be instructed to enter this resolution upon the permanent records of the Society and that a copy of this resolution be sent to the family of our departed brother, as evidence of the respect and esteem in which he was held by his fellow doctors and as a token of our sympathy in their bereavement.

Dated this 5th day of September, 1940.

J. H. McCURRY
P. W. LUTTERLOH
H. A. STROUD

DOCTORS AT WORK is the title of the sixth annual series of dramatized radio programs to be presented by the American Medical Association and the National Broadcasting Company.

The series will open Wednesday, November 13, 1940, and run for thirty consecutive weeks, closing with a broadcast from the A. M. A. meeting at Cleveland, on June 3, 1941. The program is scheduled for 10:30 P. M., Eastern Standard Time (9:30 Central; 8:30 Mountain; 7:30 Pacific time) over the Blue network, other NBC stations and Canadian stations.

The programs will dramatize what modern medicine offers the individual in the way of opportunities for better health and the more successful treatment of disease. Incidental to this main theme, the programs will explain the characteristics of the different fields of modern medicine and its specialties.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

EACH case of tuberculosis presents its own peculiar problems and no two cases are alike. The physician concentrates his attention on the particular case before him and studies the reactions generated by infection with the tubercle bacillus of that individual. While he is not directly concerned with the broad biologic principles of this age-old mass epidemic, he does gain a better insight into the individual pathogenetic factors by keeping in mind which epidemiologic factors are responsible for the changes, the increase and decrease in tuberculosis. Max Pinner has sketched some of these trends in a recent article, from which these abstracts are derived.

EPIDEMIOLOGICAL TRENDS OF TUBERCULOSIS

The epidemic, tuberculosis, is "young" when it makes its first encounter with a population; it "matures" when its contact has become fairly universal for a few generations and it is "old" when the population as a whole has become sufficiently resistant to its ravages that the death rate falls rapidly. Earliest childhood, maturity and senescence of tuberculosis are represented by the early invasion by tuberculosis of certain African tribes and a group of American Indians, the American Negro and our own white population.

Wherever tuberculosis strikes first, it is in primitive societies. By "primitive" is meant a society previously not or hardly in contact with the occidental civilization and a society that for a long period has lived in essentially unchanged, settled conditions—a population without history in the common sense of the word. Tuberculosis never comes alone to an untouched population; it always comes accompanied by, and rather through, agents of occidental civilization. It is, therefore, always associated with profound changes and disturbances of tribal life. These changes play a most significant role in shaping the epidemic features.

Borrel reports that a portion of Senegalese troops were tested with tuberculin upon arrival in France during the last war, and only 4% to 5% reacted. Many of these men were observed at a later date as tuberculous patients and on the autopsy table. The general picture was about as follows: Following a certain period without evident clinical symptoms, during which swellings of supraclavicular and tracheobronchial lymph nodes can be observed, the disease

develops rapidly with toxemia, high fever, weakness and multiple organ involvement, which in 70% leads to death. At autopsy, diffuse caseation of multiple groups of lymph nodes is dominant in 70% to 90% of the cases. One-fourth of the patients died of generalized military tuberculosis and, in a large proportion of the remainder, diffuse caseous foci were present. Here is a form of disease characterized clinically by the predominance of systemic over local symptoms, by the rapidity of its course and its high fatality. The characteristics are generalization, diffuse caseation and the absence of reparative processes.

However, the majority of Senegalese neither acquired nor died of tuberculosis disease and it is safe to assume that many healthy reactors returned to Africa, proving their resistance to tuberculosis infection.

A somewhat later stage, that of practically universal infection, is represented by an epidemic among certain Indian tribes of the Canadian plains. Following a period (1850-1880) in which there were only sporadic cases of tuberculosis, the epidemic reached its height between 1884 and 1890, during which time one out of three Indians had visible lymph node swelling and by 1906 about 20% of the school children in Qu'Apelle were operated upon for tuberculosis nodes. The death rate rose from 1,000 in 1881 to 9,000 in 1886, and falling to 2,000 in 1901, to 1,000 in 1907, and following the establishment of anti-tuberculosis work in 1930, it reached 270 in 1931-32.

The most complete epidemiological studies of tuberculosis in a relatively primitive society were made on the South African tribes that provide the laborers for the mining industry in South Africa. These studies are reviewed by the author. He points out that the epidemiological picture of South African natives is not a uniform one as these natives have been observed under three different living conditions, namely, in their native villages, during labor service in mines and during war service in France. Hence, observations limited to only one of the three localities would lead to an incomplete and biased impression.

A more mature stage of the epidemic is illustrated by tuberculosis as it occurs in the American Negro. The tuberculin index is higher than in the white American, the death rate about three times as high and the peak of the age incidence is at an earlier age. Furthermore, the shift of this peak toward older age groups, while pronounced in the white, is negligible in the Negro.

Many Negroes show the same chronic localizing type of disease as the whites, but relatively acute forms, generalizations in the form of lymphatic and hematogenous spread occur with much greater frequency in Negroes than in whites. This was demonstrated by the author in a previous study and in order to confirm these findings, he calculated the ratio of deaths from all forms of tuberculosis to deaths from disseminated tuberculosis, separately for the two races. The figures derived from the United States mortality statistics show that the relative frequency of disseminated forms is considerably higher in Negroes and that the decrease of disseminated forms during the last 17 years is much smaller in Negroes than in whites.

Several studies of tuberculosis among Negroes and whites under identical or similar living conditions, show that while the morbidity rates are closely similar, the mortality rate for the Negro is about four times higher than for the white. One writer concluded that the chances for colored children (in Baltimore) to become infected in a tuberculosis family are about equal to those of white children under similar circumstances, but the chances of dying from tuberculosis are three times greater in Negro than in white children.

Lack of space prohibits quotation of the author's discussion based on his observations but the following points stand out:

In the early phases of tuberculosis the disease is acute, rapidly fatal, generalized, without tend-

ency to heal, with toxemic symptoms overshadowing local symptoms and has a predelection for the young.

No nation or tribe free of tuberculosis has a uniformly high susceptibility to tuberculosis. The complete lack of resistance in so-called virgin soil is a myth. The individual degree of resistance and the collective frequency of the disease are not simply matters of interplay between host and bacillus but they are profoundly influenced by living conditions in the widest sense of the word.

The most spectacular decrease in tuberculosis mortality occurred, as a rule, before any organized campaign against tuberculosis could be initiated. However, anti-tuberculosis work is undoubtedly effective in later phases of the epidemic.

The South African report makes it clear that previous infection did, in no noticeable way, modify or alter tuberculous disease that developed later. A primary infection in a not highly resistant stock produces allergy without causing immunity.

There is no shred of evidence to show that immunization is transmitted by heredity. The elimination of the least resistant strains must undoubtedly play an important role in the gradual attenuation of tuberculosis, particularly so in the early phases of the epidemic.

Tuberculosis mortality parallels the socio-economic conditions, so much so that it would seem that poverty and unusual stress and strain should be the guide posts for case-finding programs.

The danger that an acute and virulent epidemic may sweep again through our population sometime after tuberculosis has been eliminated (or reduced to its minimum) because the immunizing effects of infection would then be lost, would appear slight. A population that has survived a tuberculosis epidemic and has rid itself of it is hardly comparable to a "virgin-soil" population.

Epidemiological Trends of Tuberculosis by Max Pinner, M. D., *American Review of Tuberculosis*, Vol. XLII, Sept., 1940.

There is no single absolutely reliable sign or symptom of activity in tuberculosis. Its determination must rest upon the most careful and thorough consideration of all of the general and local symptoms and signs, together with the results of the various laboratory and clinical studies. Miller, James Alex., *N. Y. State Jour. of Med.*, Dec., 1939.

THE JOURNAL

OF THE

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EDITORIALS

ELIGIBILITY TO MEMBERSHIP

It seems proper to call attention in The Journal to a constitutional amendment adopted by the Society at the 1937 annual session in Little Rock. This clarifies and, in part, restricts the former eligibility requirements of the state and component county societies. This amendment sets forth the following requirements for admission to membership: (1) the possession of the degree of Doctor of Medicine, issued by a medical college which at the time such degree was conferred was approved by the Council on Medical Education and Hospitals of the American Medical Association and (2), possession of an unrevoked license to practice medicine and surgery issued by the board of medical examiners which consists of members recommended by this Society. Attention to the provisions of this amendment by county medical societies will avoid embarrassment incident to the election of physicians who cannot constitutionally qualify for membership.

FREEDOM

In the confusion of the printed word, the remarks of radio commentators and the discussions of one's friends and chance acquaintances, there seem to be a bewildering number of issues confronting the American people at this time. Action at home and abroad is swift, indeed overwhelming, and it but natural that the average individual should lose interest in the baffling complexities of what he hears.

It seems to us that the essential decision that each of us shall make is what will be his relation to the unprecedented events in the world today, actions which threaten to forever remove from each of us our inalienable right to freedom—freedom of thought, of expression and of action? That seems to be the fundamental issue.

America is still a land of promise and of opportunity but only for so long as it remains a land of free men,—men who think, speak and act with free minds and hearts. Banish promise from life and you destroy the faith of man. Destroy a man's faith and you cast aside his dignity and decency. Then freedom can no longer be..

Every American can make his decision on these simple truths. Sooner or later every American will make that decision.

EDITORIAL COMMENT

SOCIALIZED MEDICINE

Much hue and cry has been raised within the past several years over the issue of "socialized medicine." Doctors as well as laymen have discussed it at length. The Journal feels that the following words in a letter from Wendell Wilkie, Republican candidate for President of the United States, may be of interest to the physicians of Arkansas: "You have asked my views on socialized medicine. I am against it."

REPRINT COLLECTION AT ARMY MEDICAL LIBRARY

Members are advised that their reprints will be gratefully received by the Army Medical Library, Washington, where they will be placed in a special collection, catalogued by author. This permits ready bibliography of any given writer and is a valuable supplementary source of material when the volume or original publication is temporarily unavailable. Members are urged to send copies of their published articles to the Army Medical Library, Washington, in order that the work of Arkansas authors may be thereby made available.

GOVERNMENT SUIT AGAINST THE AMERICAN MEDICAL ASSOCIATION POSTPONED

Press reports announce that the government's suit against the American Medical Association and some of its constituent bodies has been indefinitely postponed. The case was scheduled from trial beginning in October and the decision to postpone came after the Association had made all plans for its defense. It is possible that the efforts of the organized medical profession to further the defense program of the United States, efforts which would have been seriously handicapped by the presence of officers of the Association in Washington for trial, was a factor in the government's move. It is remotely possible that a more detailed announcement will be made after the election.

A COLLECTION SYSTEM

A new and novel type of collection system has appeared within the state and will shortly be offered to physicians according to information which has been received. Members who are approached to purchase this contract are urged to first write the state secretary for information which will be of help in their final decision.



PROCEEDINGS OF SOCIETIES

The Fourth Councilor District Medical Society met in dinner session at Dumas October 4th, guests of the physicians of Dumas. R. Master-son, Alexandria, and John H. Connell, New Orleans, presented a program on the clinical and pathological features of obstetrical cases. Other speakers were President H. T. Smith and Councilor S. W. Douglas.

W. A. Snodgrass, Jr., Secretary.

The Benton County Medical Society met in dinner session at Siloam Springs October 10th for scientific papers by F. M. Duckworth, Siloam Springs, and H. L. Deutsch, Stilwell, Oklahoma. Geo. M. Love, Secretary.

The First Councilor District Medical Society met in Osceola, October 2nd for the following program: Response to address of welcome, T. S. Hare, Crawfordville; "Ruptured Intervertebral Disk," Francis Murphy, Memphis; "Gout," C. H. Lutterloh, Hot Springs National Park; "Differential Diagnosis of Rheumatic Affections," O. C. Melson, Little Rock; "Acute Rheumatic Fever," N. S. Stern, Memphis; "Etiology of Chronic Arthritis," W. T. Swink, Memphis; Rheumatism as a Social and Economic Problem," W. C. Colbert, Memphis; "The Use and Abuse of Physiotherapy in Chronic Arthritis," J. F. Hamilton, Memphis; and "Medical Treatment of Rheumatoid Arthritis," W. C. Chaney, Memphis. Luncheon was served at noon. Officers elected were; President, L. D. Massey, Osceola; Vice-president, R. L. Purnell, Marion; Secretary-treasurer, J. H. McCurry, Cash. The Society will next meet at Cash.

The Sebastian County Medical Society was addressed October 8th by Fred H. Krock, "Rupture of Intervertebral Disk with Report of a Case."

The Pulaski County Medical Society was addressed, October 25th, by Edgar L. Gilcreest, San Francisco, on "Rupture and Tears of Muscles, and Tenderness in General, with Special Reference to Unusual Lesions of the Upper Arm and Shoulder."

E. H. White, Secretary.

The Southeast Arkansas Medical Society met at Dermott, September 23rd for dinner and inspection of the new Dermott Municipal Hospital. The following program was presented:

"Parental Therapy," S. B. Nadler, New Orleans, and "Carcinoma of the Fundus Uteri," G. W. Brindley, Temple, Texas.

The Fifth Councilor District Medical Society met in dinner session at Camden, October 10th, for the following program: "Duodenal Ulcer," A. Street, Vicksburg, Mississippi, and "A Doctor's Duty to Himself, to his Fellow Doctor, and to the Public," W. H. Anderson, Booneville, Mississippi.

The Second Councilor District Medical Society met in dinner session at Batesville, October 14th, for the following program: "Some of the Common Difficulties in Obstetrical Practice," W. T. Pride, Memphis, and "X-ray Treatment for Menorrhagia," D. A. Rhinehart, Little Rock. Officers elected are: President, O. L. Bone, Newark; Vice-president, L. T. Evans, Batesville, and Secretary-treasurer, O. J. T. Johnston, Batesville. The Society will next meet in Batesville.

The Ninth Course of Postgraduate Study sponsored by the Society was held at the School of Medicine, Little Rock, October 16th and 17th, with J. M. T. Finney, Jr., Baltimore, and Hubert M. Parker, Kansas City, as guest speakers. The following program was presented: "Newer Methods in the Diagnosis and Treatment of Pyelonephritis," G. W. Reagan, Little Rock; "Sterility," Clyde D. Rodgers, Little Rock; "The Essentials of Normal Nutrition," B. A. Rhinehart, Little Rock; "Intravenous Anesthesia with Pentothal Sodium," C. C. Reed, Jr., Little Rock; "Fads, Fancies and Fables About Diet," B. A. Rhinehart, Little Rock; "The Therapeutic Indications for the Use of Hormonal Preparations in Gynecology," B. A. Bennett, Little Rock, and "The Good and the Bad About Sulfanilamide and Related Drugs," J. N. Compton, Little Rock. The following refresher courses were conducted: S. C. Fulmer, Little Rock, "Physical Examination of Patients;" Henry Hollenberg, "The Symptoms, Diagnosis and Treatment of Acute Surgical Conditions Within the Abdomen;" Jos. F. Shuffield, "Fundamentals in the Treatment of Fractures;" E. H. White and associates, "Obstetrics;" Sam Phillips, "Feeding the Normal Infant during the First Year;" J. Edward Jones, "Management of the Premature Infant;" V. T. Webb, "Birth Injuries;" Irving Spitzberg, "Vitamin Deficiencies;" W. R. Parsons, "Pneumonias in Childhood;" B. P. Briggs, "Convulsions in Childhood," and D. A. and B. A. Rhinehart, "Roentgen Interpretation."

PERSONALS AND NEWS ITEMS

L. J. Kosminsky, Texarkana, attended the American Legion convention in Boston during September.

W. G. Hodges, Malvern, attended the recent meeting of the American Association of Railway Physicians in Chicago.

Dr. and Mrs. C. W. Hall, Greenwood, spent a September vacation in Michigan and Canada.

President H. T. Smith addressed the Delta Medical Society, October 9th, at Indianola, Mississippi, on "The Doctor's Responsibility."

R. B. Robins, Camden, took the special postgraduate course on fractures conducted at the Massachusetts General Hospital, Boston, during October.

R. J. Calcote, Little Rock; R. C. Cook, Little Rock; O. H. King, Hot Springs National Park; T. E. Fuller, Texarkana, and Paul L. Mahoney, Little Rock, attended the recent session of the American Academy of Ophthalmology and Otolaryngology in Cleveland.

Among those in attendance at the Kansas City Southwest Clinical Society session were C. A. Archer, DeQueen, and C. T. Chamberlain, D. W. Goldstein and C. H. Kennedy, Fort Smith.

"The Value of Aciform in Rheumatic Disorders," by F. J. Scully, Hot Springs National Park, appeared in the September Tri-State Medical Journal.

A. F. Pirnique, Little Rock, recently completed a period of active training at Pensacola in the naval reserve.

J. M. Lemons, Pine Bluff, has donated his medical library to the Jefferson County Medical Society.

H. T. Smith addressed the opening assembly of the University of Arkansas School of Medicine, September 25th.

Allen R. Russell, formerly of Little Rock, has opened an office in Pine Bluff.

T. P. Foltz has been elected a director of the Fort Smith Chamber of Commerce.

MEMBERSHIP ROSTER OF THE ARKANSAS MEDICAL SOCIETY—1940

ARKANSAS COUNTY

Davis, G. C.	Gillett
Dickens, Homer	DeWitt
Drennen, S. A.	Stuttgart
Fowler, Arthur	Humphrey
John, M. C., Jr.	Stuttgart
John, M. C., Jr.	Stuttgart
Lumsden, C. A.	DeWitt
Rasco, C. W., Jr.	DeWitt
Swindler, E. B.	Stuttgart
VanDyke, T. S.	Stuttgart
Wassell, C. M.	Key West, Fla.
Whitehead, R. H.	DeWitt
Wilson, J. G.	Keo
Word, J. T.	St. Charles

ASHLEY COUNTY

Barnes, L. C.	Hamburg
Burt, E. G.	Crossett
Cockerham, H. E.	Portland
Cone, A. E.	Portland
Crandall, M. C.	Wilmet
Fletcher, G. W.	Montrose
Hawkins, M. C.	Parkdale
Herron, J. T.	Hamburg
Mask, D. L.	Hamburg
Parker, J. L.	Snyder
Regnier, W. A.	Crossett
Reid, C. W.	Crossett
Smith, M. L.	Crossett
Spivey, C. E.	Crossett
White, E. O.	Hamburg
Woods, J. T.	Crossett

BENTON COUNTY

Atkinson, R. M.	Bentonville
Chastain, M. W.	Bentonville
Curry, W. J.	Rogers
Dixon, Chas. B.	Decatur
Duckworth, F. M.	Siloam Springs
Duncan, M. W.	Centerton
Estes, Neal D.	Rogers
Eubanks, F. G.	Decatur
Greene, L. O.	Pea Ridge
Harrison, A. J.	Springdale
Highfill, E. J.	Cave Springs
Hodges, Guy	Rogers
Hughes, G. A.	Siloam Springs
Huskins, J. D.	Siloam Springs
*Koobs, H. J. G.	Rogers
Judkins, W. D.	Pea Ridge
Love, Geo. M.	Rogers
McNeil, C. L.	Rogers
Moore, W. A.	Rogers
Peacock, A. L.	Gentry
Pickens, J. L.	New Orleans, La.
Pickens, W. A.	Bentonville
Powell, C. W.	Huntington, W. Va.
Powell, J. T.	Gravette
Scott, L. L.	Siloam Springs
Thompson, J. S.	Gravette
Williams, J. R.	Siloam Springs
Wilson, C. S.	Siloam Springs

BOONE COUNTY

Adams, A. V.	Yellville
Blackwood, J. C.	Western Grove
Fowler, T. P.	Harrison
Fowler, J. H.	Harrison
Fowler, Ross	Harrison
Gladden, J. G.	Harrison
Gray, E. M.	Mt. Home
Jackson, Ulys	Harrison
Jackson, J. L.	Harrison
Johnson, J. J.	Harrison
Kirby, H. V.	Harrison
Morrow, J. J.	Cotter
Moore, W. T.	Everton
McCoy, O. B.	Harrison
Owens, D. L.	Harrison
Poynor, W. H.	Harrison
Rust, M. E.	Harrison
Thompson, J. I.	Yellville
Watkins, W. L.	Alpena Pass
Weast, L. M.	Yellville

BRADLEY COUNTY

Crow, M. T.	Warren
Ellison, L. E.	Warren
Gannaway, C. E.	Warren
Hoffman, R. F.	Warren
Hope, J. L.	Lebanon, Mo.
Hundley, L. K.	Little Rock
Hunt, W. J.	Warren
Martin, Rufus	Warren
Martin, C. N.	Warren
Reasons, W. B.	Hermitage
Roark, W. N.	Hermitage

The Roster of the Arkansas Medical Society has been placed in the center of this issue to permit its ready removal for filing.

CARROLL COUNTY

Bohannon, J. H.	Berryville
Butt, W. J.	Fayetteville
Butt, W. A.	Green Forest
Carter, A. L.	Berryville
Donaldson, C. W.	Green Forest
John, J. F.	Eureka Springs
McCurry, D. K.	Green Forest
Newkirk, Wm. H.	Berryville
Webb, J. H.	Eureka Springs

CHICOT COUNTY

Baker, E.	Dermott
Barlow, E. E.	Dermott
Barlow, Brian E.	Dermott
Burge, J. H.	Lake Village
Clark, B. C.	Lake Village
Craig, W. A.	Eudora
Douglas, S. W.	Eudora
Easterling, W. D.	Lake Village
Hutson, W. J.	Eudora
Leverett, C. G.	Eudora
McGehee, E. P.	Lake Village
Schwarz, W. J.	Lake Village
Thompson, J. A.	Dermott

CLARK COUNTY

Bremer, J. P.	Point Cedar
Bryant, R. L.	Arkadelphia
Dickerson, D. A.	Gurdon
Doane, S. N.	Arkadelphia
McLain, J. T.	Gurdon
Prothro, Winston	Arkadelphia
Reid, Joe W.	Arkadelphia
Ross, H. A.	Arkadelphia
Ross, T. T.	Little Rock
Steed, C. J.	Gurdon
Townsend, C. K.	Arkadelphia

CLAY COUNTY

Blackwood, W. J.	Rector
Clopton, O. H.	Rector
Futrell, J. B.	Rector
Hiller, J. P.	Pollard
Jones, F. H.	Piggott
Latimer, N. J.	Corning
McGuire, J. E.	Piggott
Turner, W. E.	Piggott

CLEBURNE COUNTY

Birdsong, T. C.	Shiloh
Hall, H. J.	Clinton
Matthews, J. T.	Heber Springs

CLEVELAND COUNTY

Adams, T. L.	Rison
Dunman, B. E.	New Edinburg
Hancock, W. G.	Rison
Harris, Sidney	Herbine
Robertson, A. B.	Rison

COLUMBIA COUNTY

Baker, J. J.	Magnolia
Carrington, H. K.	Magnolia
Cooksey, W. P.	Magnolia
Horn, W. H.	Magnolia
Jones, T. H.	Waldo
Jordan, T. S.	Magnolia
Kitchens, H. M.	Waldo
Longino, L. A.	Magnolia
McLeod, G. F.	Magnolia
Mullins, G. E.	Emerson
Rushton, Joe F.	Magnolia
Smith, P. M.	Magnolia
Souter, A. J.	Waldo
Souter, T. E.	McNeil
Wilson, J. H.	Magnolia

CONWAY COUNTY

Burnett, E.	Hattiesville
Close, E.	Jerusalem
Dykstra, D. W.	Little Rock
Etheridge, C. E.	Morrilton
Halbrook, J. F.	Plumerville
Hardison, T. W.	Morrilton

Holloway, W. R.	Center Ridge
Jones, R. A.	Perry
Kelso, S. T.	Solgohachia
Matthews, J. M.	Morrilton
Mobley, H. E.	Morrilton
Scarlett, Wm. P.	Morrilton
Williams, C. Ray	Morrilton

CRAIGHEAD-POINSETT COUNTY

Alcott, Geo. B.	Weiner
*Altman, J. T.	Jonesboro
Barrett, E. R.	Jonesboro
Barrett, R. M.	Black Oak
Blanton, M. E.	Jonesboro
Burge, H. G.	Nettleton
Cantrell, M. L.	Marked Tree
Cohen, O. T.	Jonesboro
Ellis, Ira W.	Monette
Jernigan, R. M.	Jonesboro
Jones, J. K.	Lepanto
Horner, E. J.	Jonesboro
Lutterloh, P. W.	Jonesboro
McAdams, H. H.	Jonesboro
McCurry, J. H.	Cash
McDaniel, L. H.	Tyroneza
McDaniel, E. C.	Tyroneza
Nisbett, Frank	Brookland
Overstreet, W. C.	Jonesboro
Pierce, J. O.	Marked Tree
Ramsey, J. W.	Jonesboro
Ratliff, R. W.	Jonesboro
Reagan, Chas. R.	Marked Tree
Shanlever, R. C.	Jonesboro
Sloan, R. M.	Jonesboro
Stroud, E. J.	Jonesboro
Stroud, H. A.	Jonesboro
Stroud, P. T.	Jonesboro
Thorn, W. T.	Monette
Tullos, A. M.	Trumann
Verser, Joe	Harrisburg
Verser, W. W.	Harrisburg
Willett, R. H.	Jonesboro

CRAWFORD COUNTY

Bennett, B. L.	Van Buren
Bruce, B. B.	Van Buren
Boomer, F. A.	Mulberry
Campbell, C. J.	Mulberry
Crigler, J. R.	Alma
Engler, F. G.	Little Rock
Galloway, Q. R.	Alma
Kirkland, S. D.	Van Buren
Kirkland, S. S.	Marshall
Kirksey, O. J.	Mulberry
McKelvey, A. A.	Van Buren
Post, J. L.	Van Buren
Savery, H. W.	Van Buren
Stewart, J. M.	Van Buren
Young, L. G.	Van Buren

CRITTENDEN COUNTY

Blalock, J. F., Jr.	Crawfordsville
Hamilton, R.	West Memphis
Hare, T. S.	Crawfordsville
McVay, L. C.	Marion
Parker, A. C.	Clarkedale
Purnell, R. L.	Marion
Ray, R. H.	Earl
*Reed, F. M.	Turrell
Stevenson, B. M.	West Memphis
Watson, H. S.	Earl

CROSS COUNTY

Barr, A. F.	Cherry Valley
Griffin, J. L.	Vannale
Griffin, W. L.	Cherry Valley
Hickman, R. L.	Hickory Ridge
Longest, Ruffin	Wynne
Miller, J. S.	Parkin
Peterson, T. A.	Wynne
Price, T. G.	Wynne
Smith, R. S.	Parkin
Stewart, T. J.	Wynne
Wilson, Thomas	Wynne

DALLAS COUNTY

Ellis, W. S.	Fordyce
Estes, E. E.	Fordyce
Lisenbee, A. M.	Sparkman
Taylor, J. E. M.	Sparkman
Ward, W. P.	Fordyce

DESHA COUNTY

Biscoe, Gibbs	Dumas
Chennault, J. C.	McGehee
Hellums, J. H.	Dumas
Kimbro, C. H.	Tillar
Leverett, Marion	McGehee
Mac Cammon, Vernon	Arkansas City
Rands, H. A.	Dumas
Smith, H. T.	McGehee
White, R. F.	McGehee

DREW COUNTY

Binns, B. Z.	Monticello
Collins, A. S. J.	Monticello
Dickins, R. D.	Monticello
Gates, S. M.	Monticello
Jones, L. B.	Monticello
Price, J. P., Jr.	Monticello
Pope, M. Y.	Monticello
Wilson, J. S.	Monticello

FAULKNER COUNTY

Brittain, W. L.	Conway
Brittain, Mary Ruth	Conway
Brooke, H. C.	Conway
Dickerson, C. H.	Conway
Dawson, R. L.	Wooster
Downs, J. H.	Vilonia
Dunaway, L. S.	Conway
Dunaway, E. L.	Conway
Fraser, N. E.	Conway
Glover, A. J.	Guy
Hardy, H. B.	Greenbrier
Harrod, George	Conway
Hassell, L. L.	Conway
Henderson, G. L.	Conway
Kitley, J. R.	Mayflower
Lieblong, J. S.	Greenbrier
Mabry, Tom	Vilonia
McCollum, I. N.	Conway
*McDonald, W. T.	Vilonia
Taylor, R. L.	Conway
Westerfield, J. S.	Conway

FRANKLIN COUNTY

Bollinger, W. H.	Charleston
Clarke, A. S. J.	Ozark
Douglass, Thos.	Ozark
Gibbons, W. H.	Ozark
Pillstrom, E. W.	Ozark
Porter, W. C.	Ozark

GARLAND COUNTY

Adams, Frank M.	Hot Springs
Black, T. N.	Hot Springs
Blackshare, W. M.	Hot Springs
Bollmeier, L. N.	Hot Springs
Bowman, J. B.	Hot Springs
Boydstone, J. O.	Fort Benning, Ga.
Brewer, H.	Hot Springs
Browning, E. R.	Hot Springs
Bucklew, H. H.	Hot Springs
Burch, N. B.	Hot Springs
Burton, Frank	Hot Springs
Casada, B. F.	Hot Springs
Chamberlain, W. W.	Hot Springs
Chesnutt, J. H.	Hot Springs
Clardy, Floyd	Hot Springs
Coffey, G. C.	Hot Springs
Collings, H. P.	Hot Springs
Connell, W. H.	Hot Springs
Diederich, V. P.	Hot Springs
Ellis, Jack	Hot Springs
Ellis, L. R.	Hot Springs
Fletcher, G. B.	Hot Springs
Garratt, C. E.	Hot Springs
Gray, W. E.	Hot Springs
Herbert, G. A.	Hot Springs
Jarrell, Foster	Hot Springs
King, L. E.	Hot Springs
King, O. H.	Hot Springs
Klugh, W. G.	Hot Springs
Lee, D. C.	Hot Springs
Lutterloh, C. H.	Hot Springs
Martin, L. G.	Hot Springs
Moss, C. S.	Hot Springs
Nims, C. H.	Hot Springs
Pate, C. N.	Hot Springs
Porter, W. F.	Hot Springs
Preston, H. H.	Hot Springs
Proctor, J. M.	Hot Springs
Purdum, E. A.	Hot Springs
Reed, L. E.	Hot Springs
Rowland, J. F.	Hot Springs
Rowland, E. D.	Hot Springs
Scott, Jett	Hot Springs
Scully, F. J.	Hot Springs
Shaw, Ernest	Hot Springs
Short, Z. N.	Hot Springs
Smith, O. A.	Hot Springs
Smith, W. K.	Hot Springs
Smith, Euclid	Hot Springs
Stell, J. S.	Hot Springs
Stough, D. B.	Hot Springs
Strachan, J. B.	Hot Springs
Sullivan, A. G.	Hot Springs
Tarleton, F. S.	Hot Springs
Tribble, A. H.	Hot Springs
Ulferts, N. R.	Hot Springs
Wade, H. K.	Hot Springs

Wilkins, J. S.	Hot Springs
Wootton, W. T.	Hot Springs
Wright, H. K.	Hot Springs

GRANT COUNTY

Cole, C. F.	Prattville
Cole, John	Prattville
Cox, J. E.	Leola
Hope, O. W.	Sheridan
Kelly, M. F.	Sheridan
Kelly, O. R.	Sheridan
Kelly, Robert M.	Sheridan

GREENE COUNTY

Blackwood, J. D.	Jonesboro
Bridges, G. P.	Paragould
Cupp, R. W.	Marmaduke
Dillman, J. A.	Paragould
Ellington, W. E.	Paragould
Haley, R. J., Jr.	Paragould
Haley, R. J., Sr.	Paragould
Hardesty, C. A.	Paragould
Hudgins, J. J.	Paragould
Hutcherson, R. L.	Delaplaine
Lamb, W. M.	Paragould
McKelvey, Earle D.	Paragould
Self, Mack	Paragould

HEMPSTEAD COUNTY

Allison, W. G.	Hope
Branch, J. W.	Hope
Cannon, G. E.	Hope
Carrigan, P. B.	Hope
Darnall, H. H.	Fulton
Foster, R. H.	Hope
Gentry, J. E.	McCaskill
Johnson, J. D.	Fort Smith
Kolb, A. C.	Hope
Lile, L. M.	Hope
Martindale, J. G.	Hope
McKenzie, Jim	Hope
Robins, W. F.	Ozan
Smith, Don	Hope
Weaver, J. H.	Hope

HOT SPRING COUNTY

Barrier, W. F.	Malvern
Brown, H. L.	Malvern
Hodges, W. G.	Malvern
McCray, E. H.	Malvern
McCray, R. V.	Malvern
Norton, J. M.	Haskell
Pharr, J. W.	Bismark
Prickett, M. D.	Malvern

HOWARD-PIKE COUNTY

Alford, T. F.	Murfreesboro
Burleson, J. J.	Antoine
Dildy, E. V.	Nashville
Duncan, M. D.	Murfreesboro
Gibson, W. M.	Nashville
Gould, W. B.	Glenwood
Holcombe, J. T.	Mineral Springs
Holt, H. H.	Nashville
Hopkins, J. S.	Nashville
Roberts, J. L.	Nashville
Simpson, W. B.	Nashville
Tolano, W. H.	Nashville
Wood, R. L.	Delight

INDEPENDENCE COUNTY

Chambers, S. W.	Mountain Home
Bone, O. L.	Newark
Churchill, C. A.	Batesville
Copp, Noel	Calico Rock
Craig, M. S.	Batesville
*Estes, W. H.	Sage
Evans, L. T.	Batesville
Gray, E. M.	Mountain Home
Gray, F. A.	Batesville
Harris, C. L.	Melbourne
Hinkle, C. G.	Batesville
Huskey, I. M.	Cave City
Jeffery, Paul	Bethesda
Johnston, O. J. T.	Batesville
Jones, W. A.	Los Angeles, Calif.
Jones, S. S.	Calico Rock
McAdams, V. D.	Cord
Ketz, W. J.	Batesville
Monfort, J. J.	Batesville
Robertson, S. N.	Sulphur Rock
Roe, C. E.	Viola
Smith, R. L.	Melbourne
Weathers, J. L.	Salem
Wilson, W. H.	Oxford
Wood, O. S.	Salem
Wyatt, F. Q.	Batesville

JACKSON COUNTY

Best, A. L.	Newport
*Causesy, G. A.	Swifton

Elton, A. M.	Newport
Erwin, I. H.	Newport
Gray, C. R.	Newport
Harris, M. L.	Newport
Ivy, J. B.	Tuckerman
Jamison, O. A.	Tuckerman
Justice, S.	Swifton
Kimberlin, K. K.	Tuckerman
Norris, R. O.	Tuckerman
Owens, M. B.	Newport
Pierce, W. N.	Tupelo
Stephens, G. K.	Tupelo
Walker, H. O.	Newport
Watson, E. L.	Newport

JEFFERSON COUNTY

Beard, J. C.	Pine Bluff
Binns, Van C.	Pine Bluff
Bruce, W. H.	Pine Bluff
Capel, C. B.	Pine Bluff
Capel, H. T.	Pine Bluff
Caruthers, C. K.	Pine Bluff
Causesy, H. A.	Pine Bluff
Clark, O. W.	Pine Bluff
Cunningham, T. J., Sr.	Pine Bluff
Cunningham, T. J., Jr.	Pine Bluff
Hames, Fred	Pine Bluff
Hankinson, O. C.	Pine Bluff
Higginbotham, C. J.	Pine Bluff
Jenkins, J. S.	Pine Bluff
John, J. W.	Pine Bluff
Lemons, J. M.	Pine Bluff
Lowe, W. T.	Pine Bluff
Luck, B. D., Sr.	Pine Bluff
Luck, B. D., Jr.	Pine Bluff
Maynard, R. E.	Pine Bluff
McMullen, E. C.	Pine Bluff
Palmer, J. T.	Pine Bluff
Payne, Virgil	Pine Bluff
Shelton, M. A.	Wabbaseka
Simmons, Walter	Hope
Snodgrass, W. A., Jr.	Pine Bluff
Spillyards, J. S.	Pine Bluff
Walker, J. K.	Pine Bluff
Woods, R. P.	Altheimer

JOHNSON COUNTY

Burgess, M. E.	Phoenix, Ariz.
Graves, S. M.	Mt. Levi
Hardgrave, Geo. L.	Clarksville
Hunt, Earle H.	Clarksville
Johnston, R. H.	Clarksville
Kolb, J. M.	Clarksville
Kolb, J. S.	Clarksville
Pierce, S. C.	Coal Hill
Shrigley, Guy	Clarksville
Siegel, G. R.	Clarksville

LAFAYETTE COUNTY

Baker, F. E.	Stamps
Keith, A. W.	Stamps
McKnight, J. F.	Bradley
Youmans, F. W.	Lewisville

LAWRENCE COUNTY

Ball, C. C.	Ravenden
Blaine, Mitchell	Mammoth Springs
Brown, W. W.	Hardy
Cruse, E. J.	Black Rock
Elders, J. B.	Walnut Ridge
Guthrie, T. C.	Smithville
Hatcher, W. W.	Imboden
Henderson, A. G.	Imboden
Hughes, J. C.	Hoxie
Hull, H. B.	Mammoth Springs
Jackson, J. F.	Walnut Ridge
Johnson, T. Z.	Walnut Ridge
Kendall, W. S.	Strawberry
Land, J. C.	Walnut Ridge
Merrell, J. L.	Hoxie
Tibbels, Chas. D.	Black Rock
Robinson, W. J.	Portia
Townsend, C. C.	Walnut Ridge
Watkins, G. Max	Walnut Ridge

LEE COUNTY

Bogart, H. D.	Marianna
Crawford, W. S.	Marianna
Chaffin, C. W.	Moro
Hamner, J. H.	Aubrey
Hodge, N. C.	Marianna
McClendon, Mac	Marianna
*White, H. L.	Rondo

LINCOLN COUNTY

Atkinson, H. H.	Gould
Bailey, B. L.	Star City
Dixon, C. W.	Gould
Johnson, R. L.	Grady
Ringgold, G. W.	Gould
Tarver, Quinton	Star City
Taylor, L. T.	Star City

Thiolliere, A. C. North Little Rock
Williams, A. F. Cornerville
Wood, G. C. Grady

LITTLE RIVER COUNTY

*Castile, Herman Foreman
King, E. R. Ashdown
LeFevers, R. R. Foreman
Phillips, P. H. Ashdown
Ringgold, J. W. Ashdown
Yates, E. W. Foreman

LONOKE COUNTY

Beaty, S. S. England
Brewer, J. F. Kerrs (P.O. Scott)
Callahan, E. A. Carlisle
Corn, F. A. Lonoke
Crowgey, W. B. Scott
Harris, E. H. Coy
Southall, S. A. Lonoke
Ward, O. D. England
Watson, A. C. Haskell
Wells, J. B. Scott
Whaley, E. S. Carlisle

MADISON COUNTY

Beeby, Chas. B. Huntsville
Counts, Geo. D. Wesley
Hill, N. J. Hindsville
Walker, J. F. St. Paul
Youngblood, Fred Little Rock

MILLER COUNTY

Burnett, J. W. Texarkana
Collom, S. A. Texarkana
Daniel, N. B. Texarkana
Daubs, W. H. Foreman
Easley, E. J. Arkadelphia
Fuller, T. E. Texarkana
Good, L. P. Texarkana
Hibbitts, Wm. Texarkana
Hunt, Preston Texarkana
Kirkpatrick, R. R. Texarkana
Kittrell, T. F. Texarkana
Kosminsky, L. J. Texarkana
Lanier, L. H. Texarkana
Laws, C. S. Texarkana
Lee, A. G. Texarkana
Lennard, F. M. Texarkana
Longino, H. E. Texarkana
Middleton, B. C. Texarkana
Mosley, K. T. Boston, Mass.
Murry, H. E. Texarkana
Parsons, G. W. Texarkana
Porter, John T. Texarkana
Priest, P. D. Texarkana
Robins, R. R. Texarkana
Smith, W. D. Texarkana
Williams, J. F. Texarkana

MISSISSIPPI COUNTY

Atkinson, Gean S. Manila
Atkinson, George Manila
Beasley, J. E. Blytheville
Boyd, D. L. Blytheville
Campbell, J. H. Joiner
Dorman, J. W. Dyess
Ellis, N. B. Wilson
Harwell, C. M. Osceola
Hill, E. V. Blytheville
Hosey, N. R. Joiner
Hubener, L. L. Blytheville
Hudson, Thos. F. Luxora
Husband, F. L. Blytheville
Johnson, I. R. Blytheville
Johnson, R. L. Bassett
Mahan, T. K. Blytheville
Massey, L. D. Osceola
Polk, J. T. Keiser
Robinson, A. E. Leachville
Saliba, J. A. Blytheville
Schirmer, R. E. Hot Springs
Skaller, M. L. Blytheville
Smith, F. D. Blytheville
Stevens, C. C. Blytheville
Sim, H. C. Blytheville
Tidwell, J. L. Dall
Walls, J. M. Blytheville
Webb, Floyd Blytheville
Wilson, C. E. Blytheville

MONROE COUNTY

Boswell, W. L. Clarendon
Bradley, W. T. Blackton
Dalton, M. L. Brinkley
Maguire, F. C. Clarendon
Martin, W. H. Holly Grove
McKnight, C. H. Brinkley
McKnight, E. D. Brinkley
Murphey, N. E. Clarendon

MONTGOMERY COUNTY

Freeman, W. C. Mt. Ida
McLean, J. H. Caddo Gap
Robins, J. D. Mt. Ida
Stueart, J. B. Norman

NEVADA COUNTY

Buchanan, A. S. Prescott
Hairston, Glenn G. Prescott
Harrell, L. J. Prescott
Hesterly, S. J. Prescott
Hesterly, J. B. Prescott
Hirst, O. G. Prescott
Hughes, F. A. Nashville, Tenn.
McDaniel, T. W. Boughton
Pool, W. B. H. Rosston

OUACHITA COUNTY

Byrd, E. J. Bearden
Clemens, J. P. Stephens
Early, C. S. Camden
Jameson, J. B. Camden
Kennerly, R. C. Camden
McGill, S. D. Camden
Partee, N. G. Camden
Plunkett, C. M. Camden
Powell, B. V. Camden
Rhine, T. E. Thornton
Rinehart, J. S. Camden
Robins, R. B. Camden
Robins, R. B. Camden
Rushing, J. L. Chidester
Thompson, H. F. Bearden
Thompson, S. A. Camden
Whitehead, R. H., Jr. Omaha, Neb.
Word, N. S. Camden

PHILLIPS COUNTY

Baker, J. P. West Helena
Blackwood, J. Q. Helena
Butts, J. W. Helena
Connolly, W. B. Helena
Cox, A. W. Helena
Cox, A. E. Helena
Cruise, J. J. Elaine
Dozier, F. S. Marvell
Ellis, J. B., Sr. Helena
Ellis, W. A., Jr. Helena
Fink, M. Helena
Johnston, W. W. Helena
King, W. C. Helena
King, J. A. Elaine
King, J. W. Helena
Kultgen, Edward Elaine
Maddox, A. H. Elaine
Nicholls, J. W. Helena
Norton, E. F. Marvell
Orr, W. R. Helena
Parker, O. Wabash
Rightor, H. H. Helena
Russwurm, W. C. Helena
Storm, Geo. R. Helena

POLK COUNTY

Bogard, J. T. Mena
Campbell, C. A. Hatfield
Hawkins, B. H. Mena
Heller, H. G. Mena
Hilton, J. G. Mena
Lee, F. A. Vandervoort
Meirs, E. N. Mena
McElroy, F. Q. Mena
*Murphy, J. H. Opal
Nisbett, J. M. Forrest City
Redman, Pierre Mena

POPE-YELL COUNTY

Ballenger, W. E. Plainview
Berryman, L. D. Russellville
Cowan, R. London
Gardner, L. Russellville
Grace, Kent Bellville
Hays, J. F. Russellville
Hood, Robert Russellville
Hoyt, Jonathan Dardanelle
Hunt, E. C. Ola
Millard, Roy I. Russellville
Montgomery, H. L. Gravelly
Sexton, J. W. Dover
Smith, L. M. Russellville
Smith, R. L. Russellville
Stanford, J. M. Russellville
Teeter, B. R. Russellville
*Teeter, C. R. Russellville

PRAIRIE COUNTY

Adams, Edward DeValls Bluff
Crockett, W. H. Biscoe
Callev, J. H. Little Rock
Gilliam, J. C. Des Arc

Lynn, J. R. Hazen
Parker, W. M. DeValls Bluff
Porter, T. G. Hazen
Williams, W. J. B. Des Arc

PULASKI COUNTY

Aday, J. Leo Little Rock
Agar, John Little Rock
Allen, Hoyt R. Little Rock
Allen, Estes Little Rock
Anderson, C. C. Little Rock
Arkabauer, Chas. Little Rock
Atkinson, Shelby Little Rock
Autry, P. G. Little Rock
Bailey, W. E. Little Rock
Banks, Jeff Little Rock
Barrier, L. F. Little Rock
Bennett, B. A. Little Rock
Blakely, R. M. Little Rock
Blankfort, Gerald Little Rock
Bond, S. P. Little Rock
Briggs, B. P. Little Rock
Brooks, C. M. Little Rock
Brown, T. D. Little Rock
Calcote, R. J. Little Rock
Caldwell, Robert Little Rock
Carruthers, F. W. Little Rock
Cazort, Allen Little Rock
Cheairs, D. T. Little Rock
Chesnutt, C. R. Little Rock
Choate, H. L. Little Rock
Church, B. L. North Little Rock
Compton, J. N. Little Rock
Cook, R. C. Little Rock
Coon, A. B. Little Rock
Cosgrove, K. W. Little Rock
Crawford, J. B. Little Rock
Cummins, Bryce Little Rock
Cunningham, J. C. Little Rock
Darby, W. J. Ann Arbor, Mich.
Darnall, R. F. Little Rock
Davis, J. C. Little Rock
Day, E. O. Little Rock
Dibrell, J. L. Little Rock
Dibrell, J. R. Little Rock
Dishongh, H. A. Little Rock
Donaldson, J. K. Little Rock
Eubanks, R. M. Little Rock
Fatherree, L. L. Little Rock
Faust, W. H. Little Rock
Ferguson, R. L. Chicago, Ill.
Fowler, H. D. Little Rock
Fletcher, Elizabeth D. Little Rock
Freeman, Theo. Little Rock
*Freemyer, W. N. Little Rock
Fuller, H. L. Little Rock
Fulmer, D. W. Little Rock
Fulmer, P. M. Little Rock
Fulmer, S. C. Little Rock
Gann, Dewell, Jr. Little Rock
Gay, E. C. Little Rock
Gray, A. F. Little Rock
Gray, Oscar Little Rock
Grayson, W. B. Little Rock
Hardeman, D. R. Little Rock
Harrell, W. B., Jr. Little Rock
Harris, R. P. Austin, Tex.
Harris, F. W. Little Rock
Hayes, J. Donald Little Rock
Hayes, J. Harry Little Rock
Henry, C. R. Little Rock
Higgins, H. A. Little Rock
Hoge, S. F. Wadsworth, Kansas
Hollenberg, H. G. Little Rock
Hollis, N. T. Little Rock
Holmes, Glen M. Little Rock
*Howell, A. R. Little Rock
Hummel, H. G. Little Rock
Hundling, H. W. Little Rock
Hyatt, C. L. Little Rock
Hyatt, D. T. Little Rock
Johnson, Glenn H. Little Rock
Jones, H. Fay H. Little Rock
Junkin, S. P. Little Rock
Kilbury, M. J. Little Rock
Kory, R. C. Little Rock
Kriesel, W. A. Little Rock
Lamb, W. A. Little Rock
Langston, W. C. Little Rock
Law, R. A. Little Rock
Levy, J. S. Little Rock
Lewis, G. V. Little Rock
Lyons, V. E. North Little Rock
Mahoney, Paul L. Little Rock
May, C. B. Little Rock
May, John R. Little Rock
McCaskill, M. E. Little Rock
McClain, M. D. Houston, Tex.
McLochlin, R. E. Little Rock
McRae, W. M. Little Rock
Melson, Madeline Little Rock
Meison, O. C. Little Rock

Moore, R. D., Jr.	Mt. Pleasant, Tex.	Buffington, T. E.	Benton	Mahony, F. O.	El Dorado
Morgans, Dollie	Little Rock	Burks, J. A.	Benton	Mayfield, H. F.	Huttig
Murphey, Pat	Little Rock	Gann, Dewell	Benton	Mayfield, H. J.	El Dorado
Newman, W. V.	Little Rock	Jones, C. W.	Benton	McGraw, S. J.	El Dorado
Nixon, Ewing	Blytheville	Lawson, M. G.	Benton	McCall, Daniel	El Dorado
Oates, Charles E.	Little Rock	Little, J. E.	Haskell	Mitchell, J. G.	El Dorado
Parsons, W. R.	Little Rock	Phillips, B. L.	Bauxite	Moore, B. L.	El Dorado
Parsons, John E., Jr.	Little Rock	Walton, C. R.	Murfreesboro	Moore, J. A.	El Dorado
Patterson, R. Q.	Little Rock	Ward, W. W.	Alexander	Munn, E. J.	El Dorado
Phillips, Sam	Little Rock			Murphy, G. D.	El Dorado
Phipps, W. E.	North Little Rock			Murphy, H. A.	El Dorado
Pirnique, A. F.	Little Rock			Muse, P. H.	Junction City
Poth, E. J.	Baltimore, Md.			Newton, W. L.	Smackover
Raney, Thos. J.	Little Rock			*Patterson, W. L.	El Dorado
Reagan, G. W.	Little Rock			Patton, Doyle L.	El Dorado
Reagan, L. D.	Little Rock			Poole, B. D.	El Dorado
Reaves, B. J.	Little Rock			Riley, W. S.	El Dorado
Reed, C. C., Sr.	Little Rock			Russell, M. V.	El Dorado
Reed, C. C., Jr.	Little Rock			Slaughter, J. W.	El Dorado
Rhinehart, B. A.	Little Rock			Sheppard, J. K.	El Dorado
Rhinehart, D. A.	Little Rock			Sheppard, J. M.	El Dorado
Richardson, W. R.	Little Rock			Smith, J. M.	Smackover
Riegler, N. W.	Little Rock			Smith, D. V.	Huttig
Ritchie, E. J.	North Little Rock			*Vines, F. P.	El Dorado
Roberts, John N.	Little Rock			Wharton, J. B., Sr.	El Dorado
Robertson, Gaynelle	Baltimore, Md.			Wharton, J. B., Jr.	El Dorado
Robinson, B. L.	Little Rock			White, D. E.	El Dorado
Rodgers, Clyde D.	Little Rock			Wozencraft, W. L.	El Dorado
Rosenbaum, C. A.	Little Rock				
Rowland, R. E.	Little Rock				
Ruff, H. E.	Little Rock				
Sadler, W. L.	Little Rock				
Samuel, John	Little Rock				
Samuel, W. L.	Little Rock				
Sanderlin, J. H.	Little Rock				
Shearer, W. F.	Little Rock				
Shipp, Harvey	Little Rock				
Shipp, A. C.	Little Rock				
Shuffield, J. F.	Little Rock				
Shukers, C. F.	Little Rock				
Smith, R. T.	Little Rock				
Smith, John W.	Little Rock				
Smith, W. Myers	Little Rock				
Snodgrass, W. A.	Little Rock				
Sparks, A. R.	Little Rock				
Stathakis, John	Little Rock				
Stern, Howard S.	Little Rock				
Stewart, H. V.	Little Rock				
Stover, A. R.	Oak Park, Ill.				
Strauss, A. W.	Little Rock				
Summers, J. A.	Little Rock				
Switzer, D. M.	North Little Rock				
Thomas, P. E.	Little Rock				
Thompson, G. D.	Little Rock				
Thompson, E. I.	Little Rock				
Vinsonhaler, Frank	Little Rock				
Wallis, Chas.	Little Rock				
Watkins, Anderson	Little Rock				
Watkins, John G.	Little Rock				
Watson, C. F.	Little Rock				
Washburn, A. M.	Little Rock				
Wayman, A. K.	Little Rock				
Wayne, J. R.	Little Rock				
Webb, V. T.	Little Rock				
Weny, N. F.	Little Rock				
White, E. H.	Little Rock				
*Witt, C. E.	Little Rock				
Woern, W. H.	England				
Young, R. G.	Mabelvale				
Zell, L. M.	Little Rock				

SCOTT COUNTY

Bevill, Cheves Waldron

SEARCY COUNTY

Bing, E. A. Marshall
 Cotton, J. O. Leslie
 Daniel, S. G. Marshall
 Evans, P. L. Marshall
 Fendley, E. G. Leslie
 *Henley, J. A. Marshall
 Leslie, J. O. Marshall
 Rogers, W. F. St. Joe
 Wood, E. W. Marshall

SEBASTIAN COUNTY

Adams, W. F. Fort Smith
 Amis, J. W. Fort Smith
 Arnold, W. O. Fort Smith
 Barker, H. M. State Sanatorium
 Benefield, C. E. Fort Smith
 Benefield, J. H. Fort Smith
 Billingsley, C. B. Fort Smith
 Blair, A. A. Fort Smith
 Brooksher, W. R. Fort Smith
 Bungart, C. S. Fort Smith
 Chamberlain, C. T. Fort Smith
 Coffman, J. S. Lavaca
 Crigler, R. E. Fort Smith
 Dancy, R. J. State Sanatorium
 Dickey, A. B. State Sanatorium
 Disney, E. K. State Sanatorium
 Dorente, D. R. Mineral Wells, Tex.
 Dorsey, H. C. Fort Smith
 Eberle, W. G. Fort Smith
 Foltz, T. P. Fort Smith
 Foster, M. E. Fort Smith
 Freer, B. W. Fort Smith
 Goldstein, D. W. Fort Smith
 Hall, C. W. Greenwood
 Henry, Louise Fort Smith
 Henry, L. M. Fort Smith
 Hederick, Rogers Fort Barrancas, Fla.
 Hibbard, R. J. B. State Sanatorium
 Hoge, A. F. Fort Smith
 Holt, C. S. Fort Smith
 Honomichl, O. R. Hackett
 Johnson, Hugh Fort Smith
 Johnson, J. E. Fort Smith
 Jones, I. F. Fort Smith
 Kellum, J. L. Fort Smith
 Kennedy, C. H. Fort Smith
 Krock, F. H. Fort Smith
 McConnell, S. P. Booneville
 Means, C. S. Fort Smith
 Moody, J. E. State Sanatorium
 Moulton, H. Fort Smith
 Moulton, E. C. Fort Smith
 Nowlin, R. R. State Sanatorium
 Riley, J. D. State Sanatorium
 Riggins, W. C. Little Rock
 Rose, W. F. Fort Smith
 Scott, M. H. Fort Smith
 Smith, H. H. Fort Smith
 *Smith, R. T. Fort Smith
 Southard, J. S. Fort Smith
 Stevenson, J. E. Fort Smith
 Stubbs, S. P. Fort Smith
 Ware, B. L. Greenwood
 Weddington, R. E. Melbourne
 Wilson, C. L. Fort Smith
 Wolfermann, S. J. Fort Smith
 Woods, G. G. Huntington
 Woods, W. M. Huntington
 Yankoff, P. D. Fort Smith

UNION COUNTY

Atkinson, O. L. Hampton
 Cathey, A. D. El Dorado
 Crow, M. B. El Dorado
 Cullins, J. G. American Lake, Wash.
 Debolt, G. C. El Dorado
 Fincher, L. G. El Dorado
 Harper, J. W. El Dorado
 *Harper, W. L. Junction City
 Irby, F. L. El Dorado
 Kennedy, C. E. Smackover
 Kitchens, D. K. Fox Creek, Mich.
 Levine, David El Dorado

SEVIER COUNTY

Archer, C. A. DeQueen
 Dickinson, R. C. Horatio
 *Graves, J. C. Lockesburg
 Hanchey, C. C. DeQueen
 Hendricks, J. S. DeQueen
 Hendrix, B. E. Gilliam
 Hopkins, R. L. DeQueen
 Jones, I. G. DeQueen
 Kimball, G. L. DeQueen
 Kitchens, C. E. DeQueen
 Norwood, M. L. Lockesburg

WASHINGTON COUNTY

Baggett, Jeff Prairie Grove
 Bean, J. L. Lincoln
 Bryant, R. H. Fayetteville
 Callen, C. B. Fayetteville
 Ellis, E. F. Fayetteville
 Gilbert, A. A. Fayetteville
 Harr, H. T. Fayetteville
 Hathcock, Alfred Fayetteville
 Hathcock, P. L. Fayetteville
 Hathcock, Preston Fayetteville
 Hawkins, Binford Prairie Grove
 Henry, R. T. Springdale
 Howze, H. H. Fayetteville
 Huntington, R. H. Fayetteville
 Lesh, Vincent Fayetteville
 Lesh, Ruth Ellis Fayetteville
 Lewis, James F. Fayetteville
 Miller, R. W. Fayetteville
 Mock, W. H. Prairie Grove
 Richardson, Fount Fayetteville
 Robinson, James A. Summers
 Sisco, C. P. Springdale
 Sisco, Friedman Springdale
 Turner, Roy J. Fayetteville

WHITE COUNTY

Abington, E. H. Beebe
 Abington, W. H. Beebe
 Adair, T. L. Bald Knob
 Allbright, S. J. Searcy
 Burton, G. C. Bald Knob
 Dunklin, A. J. Searcy
 Emerson, A. G. Bald Knob
 Felts, W. R. Judsonia
 Hardy, F. P. Searcy
 Hassell, A. B. Rose Bud
 Hawkins, M. C., Jr. Searcy
 Huggins, A. H. Searcy
 Mobley, Hugh Searcy
 Peeler, C. M. Pangburn
 Sloan, D. W. Beebe
 Sloan, J. R. Garner
 Spain, A. L. Letona

WOODRUFF COUNTY

*Biles, L. E. Augusta
 Brewer, E. F. Augusta
 Dungan, C. E. Augusta
 Evans, R. H. Chatfield
 Fraser, R. L. McCrory
 Maguire, F. C., Sr. Augusta
 Morris, J. W. McCrory
 Murphey, Frank Lexa
 Tate, A. B. Augusta
 Wilkins, W. T. Cotton Plant

RANDOLPH COUNTY

Baltz, M. A. Pocahontas
 Brown, J. W. Pocahontas
 Finney, C. Maynard
 Hamil, W. E. Pocahontas
 Handley, E. L. Pocahontas
 Loftis, J. R. Pocahontas
 Loftis, W. O. Pocahontas
 Ryburn, J. W. Pocahontas
 Smith, R. O. Biggers

SAINT FRANCIS COUNTY

Bogart, J. A. Forrest City
 Bogart, C. N. Forrest City
 Burch, W. D. Hughes
 Caldwell, A. B. Forrest City
 Chaffin, E. J. Hughes
 Davidson, J. S. Forrest City
 Lanier, Paul S. Round Pond
 McCown, N. C. Forrest City
 Powell, C. V. Forrest City
 Rush, J. O. Forrest City
 Winter, W. A. Widener

SALINE COUNTY

Ashby, John Benton
 Blakely, M. M. Benton
 Buckley, E. A. Bauxite

J. D. Riley, State Sanatorium, addressed the Southern Tuberculosis Conference at Monroe, Louisiana, October 21st on "Use of X-ray in Chest Examinations by Physicians in General Practice."

Roger Hederick, Booneville, has accepted appointment in the Army Medical Corps and has been assigned to Fort Barrancas, Florida.

Donald Hayes, Little Rock, addressed the student body of Subiaco Academy, Subiaco, October 7th on "A Preparedness Program for Adult Life."

W. R. Parsons has been elected first vice-president of the Little Rock Exchange Club.

Leon E. King, Hot Springs National Park, visited clinics in New York, Philadelphia and Cleveland during October and participated in the program of the American Congress of Physical Therapy.

W. M. Lamb has been elected president of the Paragould Kiwanis Club.

BORN—On September 29th, a daughter, to Dr. and Mrs. Lewis Hyatt, Little Rock.

L. L. Fatherree, Little Rock, attended the American Public Health Association at Detroit during October.

J. C. Land, Walnut Ridge, addressed the Frisco System Medical Association at Springfield, Missouri, October 8th on "Nocturnal Enuresis."

R. M. Eubanks, Little Rock, visited in Rochester, New York, and Chicago, during September.

MARRIED—W. J. Ketz, and Miss Frances Barnett, Batesville, on September 22nd, 1940.

The Tri-State Medical Society has elected the following officers: President, R. B. Robins, Camden; Vice-president, Joe F. Rushton, Magnolia; and Secretary-treasurer, William Hibbitts, Texarkana.

Ralph E. Crigler, Fort Smith, attended the session of the American College of Proctology in Chicago during October.

R. B. Robins recently addressed the Camden Rotary Club on "Havana."

John L. Ruff has been appointed medical director for Crawford, Franklin and Logan counties, succeeding A. S. J. Clarke, who will enter the School of Public Health at Harvard University.

N. E. Murphey, Clarendon, was recently honored by a surprise party on his birthday.

BORN—To Dr. and Mrs. J. K. Sheppard, El Dorado, a son, on September 10th.

The Dermott Municipal Hospital has selected H. T. Smith, McGehee, Chief of Staff; E. E. Barlow, Dermott, Vice-chief, and B. E. Barlow, Dermott, Secretary.

Robert Hood, Russellville, has been appointed to the Department of Pediatrics, University of Arkansas School of Medicine.

W. G. Hodges, Malvern, recently visited the Mayo Clinic.

Frank Vinsonhaler, Little Rock, addressed the student body of the University of Arkansas School of Medicine on Founder's Day, October 7th.

Dr. and Mrs. E. J. Stroud, Jonesboro, attended clinics in the East and the American College of Surgeons in Chicago during October.

W. F. Adams, Fort Smith, took special work in obstetrics and gynecology at Cook County Hospital, Chicago, during October.

BORN—On September 30th, a son, to Dr. and Mrs. H. J. Mayfield, El Dorado.

Perry Dalton, formerly of the resident staff of Charity Hospital, Shreveport, has become an associate of J. B. Jameson at Camden.

Jett Scott, Hot Springs National Park, has been appointed examiner for the Civil Aeronautics Authority.

F. Walter Carruthers, Little Rock, recently addressed the Medical Association of the Rock Island Railroad at Oklahoma City.

E. H. White and B. James Reaves, Little Rock, attended the recent meeting of the Central Association of Obstetricians and Gynecologists in Indianapolis.

Drs. Hayes and Hayes have moved to 201-205 Donaghey Building, Little Rock.

Dr. and Mrs. J. K. Donaldson, Little Rock, spent a recent vacation in San Antonio.

Drs. Cunningham are erecting a clinic building at Pine Bluff.

F. G. Engler, Little Rock, recently took post-graduate work in New Orleans.

S. F. Hoge, Little Rock, has accepted appointment with the Veterans Administration Facility, Wadsworth, Kansas.

W. B. Grayson and J. A. Summers, Little Rock, attended the American Public Health Association meeting in Detroit.

Frank Vinsonhaler, Little Rock, addressed the Scottish Rite members of White County, at Searcy, October 10th.

F. Walter Carruthers, Little Rock, was guest speaker at a recent meeting of the Chicago Orthopedic Society.

Joe F. Rushton and Sanford Monroe are erecting a clinic building in Magnolia.

Dr. and Mrs. B. James Reaves, Little Rock, recently visited New York and the East.

H. A. Stroud, Jonesboro, recently addressed the Lions Club of that city on his trip through the Canadian Rockies.

VITAMIN-FREE FOODS FOR RESEARCH!

A recent announcement by the Research Laboratories of the S. M. A. Corporation reveals that they are now in a position to provide vitamin-free casein and other vitamin-free foods for experimental purposes to researchers who have previously been obliged to manufacture these items for private use.

For many years the S. M. A. Corporation has been producing these foods exclusively for use in their laboratories. Now, with the expansion of their own facilities and the realization of the convenience to others engaged in laboratory work this offer is made to provide vitamin-free diets at an exceptionally reasonable cost. Quantities of one, five, ten or 100 pounds or more may be ordered directly from the Research Laboratories, S. M. A. Corporation, Chagrin Falls, Ohio.

OBITUARY

HARRY LEE WHITE, age 72 years, died at his home in Rondo, September 19th. Born in Ohio, Dr. White graduated from the Louisville and Hospital Medical College in 1908 and had practiced in Lee County the past 32 years. Surviving relatives are his wife, a daughter and a brother.

SAMUEL AUGUSTUS SCOTT, aged 89, oldest resident of Eudora, died in a hospital, October 14th. Born in Alabama, he came to Chicot County in 1884. He graduated from the University of Louisville School of Medicine in 1877. In addition to establishing the first mercantile establishment in Eudora, he was first president of the Bank of Eudora. He was the first president of the Chicot County Medical Society and was active in the affairs of organized medicine until his retirement. Surviving relatives are his wife and a son.

LEE EDWIN BILES, age 67 years, a physician at Augusta for 30 years, died in a hospital at Searcy, October 15th. Born at Rosebud, White County, December 11, 1872, he graduated from the Kentucky School of Medicine in 1905. For the past 21 years he had served as deacon in the First Baptist church. He was a member of the Scottish Rite Masonic Bodies. For many years he had served as secretary of the Woodruff County Medical Society and was active in the affairs of organized medicine. Surviving relatives are his wife, two sons and a daughter.

RANDOM THOUGHTS OF THE SECRETARY

September 19th. We step aboard the Southern Belle for an afternoon ride through the Ozarks, somewhat drab in their late summer appearance. From Kansas City we ride the Golden State Limited, an old acquaintance in luxury trains whose glamour cannot be entirely lost to a streamliner after all these years. And comfortably we ride through the night to Chicago.

September 20th. Arriving to the customary confusion of daylight time in Chicago, a habit of this town to which we seem unable to acclimate ourselves. To the Preparedness Conference where there is much of talk and a rare positive statement, the general qualification being, "that's what they said last in Washington." Meeting with Cohenour again and noting that he, too, has joined the non-smoking group. In at 8:50 A. M. and out tonight at 8:50 with no opportunity to determine if The Stevens is more hospitable than the Palmer House, nor to see anything of the "loop," but managing to eat a steak with Harding and Shanklin must agree that here is "Adventure in Good Eating."

September 23rd. This day we are much occupied with a review of return postal cards to check up on the response of Arkansas physicians to the preparedness questionnaires. Marveling that the more postal notices we mail, the more returns we get that no questionnaire has been received. What can doctors do with the mail they surely receive? And among those to whom this office has mailed two questionnaires, having also the word of the American Medical Association that they mailed one, is a past-president, though we cannot complain here as he did sign and return a postal card, which is something that several past-presidents have yet to do. This afternoon away to Dermott where the Southeast Arkansas Society presents an exceptional program and, regretfully, we are not afforded time to inspect the new hospital, nor to even see Grandfather Barlow's newest cause for pride in her crib, the intricacies of driving to Little Rock, riding a train to Dermott, hitch-hiking with Joe Shuffield in Dean Cromer's car back to Little Rock, etc., being what they are with the accompaniment of much rain. It might be mentioned that Hoyt Allen and Fay Jones were in such a hurry to get to Dermott to inspect the new hospital that we must be left behind at Little Rock by a mere twenty minutes; this eagerness certain to be a source of pleasure to the Dermott citizens. Riding Little Rock to Clarksville with Siegel, ever enthusiastic to the world about and a pleasant companion.

September 24th. Grayson, Ross, Stewart and Dykstra pay us a visit, formally notifying us of the ambitious program for blood examinations of all selective service registrants. Our thinly-veiled cynicism does not strike any great force of enthusiasm but the conference is enjoyed by all present as affording less of difficulty than have similar meetings in the past. Continuing our contacts with a paternalistic Federal government, tonight we sit in at a committee meeting where the discussion objective is the method of making physical examinations of certain Farm Security clients. Here we get the first evidence that our Federal government is not totally unacquainted with the proposition of a "fair fee for service rendered." Completing the day in a light vein comes Chamberlain and lady, he more flip than ever, expansively pleased over his cricket episode with Foltz.

September 27th. This day the family plays hookey to see "The Greatest Show on Earth," which it is, and more.

If there be one of you who does not still enjoy the thrill of a circus, it is time to check up on yourself—the years are taking a too heavy toll. In all the afternoon crowd we did not see one Little Rock doctor, doubtless all took in the night performance. So, throwing hunger into a confused retreat with a Toddle House steak plate, we are off and away with our memories of a big day. Too, we shall remember that in Little Rock, Armitage Harper has influence and knows how to get the "best tickets."

September 29th. This Sunday afternoon to Mount Nebo, an almost forgotten summer resort, albeit a paternalistic Federal government has spent much money in an effort to revive the place. The folly of capital expenditure with no provision for maintenance is headlined in this state park: picnic grounds in weeds, the pavilion open to the weather (the shutters lying on the ground), grass growing in the walks, signs broken, obvious evidence that care has been denied this beauty spot. Certainly a lesson is to be learned as to the fate of those \$150,000 hospitals. We hope T. W. Hardison may find a solution for the salvage of this Arkansas recreational area. Possibly the support of the citizens of Russellville and Dardanelle is all that is needed.

October 6th. The committees meet in Hot Springs National Park today, a session wherein each member apparently talked to his heart's content. Long after adjournment, as we tour the ostrich farm with the youngster, comes the realization that talk was suppressed firmly by Chairman Norwood, but only he knew the limitation was in effect. To us, that is chairmanship in its perfection!

October 7th. Earle Hunt regales the staff meeting with some personal experiences of a patient who expels air forcibly, spasmodically and with continuous regularity through the nose and mouth, for the relief of which countless remedies have been suggested, including the lowly garlic sandwich. An interesting meditation in the machinations of the mind, its complexities and the desire for a bit of glory on the part of a repressed individual.

October 8th. With enthusiasm and thoroughness, Krock reports the first surgical intervention in these parts on a ruptured intervertebral disk and many a one in the audience recalls a case or more in the past wherein there is a striking similarity of the clinical picture.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Dear Auxiliary Member:

As the fall season approaches, and the club year begins, I know you are wondering just how much you can do for the Auxiliary during this year.

It is every officer's worthy aim to excell her predecessor and thereby keep a healthy progress in the organization. Each year brings new opportunities and new responsibilities.

One of the major aims of the National Auxiliary for this year is to extend the circulation of the bulletin, formerly the News Letter. It is now an attractive little booklet published quarterly and the price is \$1.00 per year. As it is our official voice of the National Auxiliary, I am asking that you make its study one of your objectives for the fiscal year.

We are interested in anything only to the extent of our information, hence it is most important to our progress that Auxiliary information reach the members.

The medical profession needs the support of its women now more than ever in its history. The October issue will carry a vital message from our National president, Mrs. Holcombe, also a direct message to the women from Dr. Van Etten, the president of the American Medical Association. News and reports from various Auxiliaries will be carried in each issue.

We hope to have 6,000 women reading the bulletin this year, which is approximately one-fourth of the membership. By this means the program and the news of the National Auxiliary is presented regularly and directly to the membership.

Enclosed is a subscription blank and self-addressed envelope, which we hope you will "Fill In" and mail together with "\$1.00," the subscription price of the bulletin, to the National Circulation Manager, Mrs. H. E. Cristem-berry, Highland Drive, Knoxville, Tenn.

In launching this subscription campaign, your response and promptness will play a large part in its success. I again respectfully urge your cooperation.

With best wishes for a most happy and successful year. I am

Sincerely yours,

MRS. J. MURRY SMITH,
State Circulation Manager of the Bulletin,
Smackover, Arkansas.

"Help Arkansas To Go Over The Top, Subscribe To The Bulletin."

The Jefferson County Medical Auxiliary entertained September 27th at the home of Dr. and Mrs. Virgil Payne with a buffet supper for the Medical Society. Assisting Mrs. Payne in entertaining were Mrs. Fred Hames, Mrs. J. C. Beard, Mrs. William Snodgrass, Mrs. John Walker, Mrs. R. P. Woods, of Altheimer, and Mrs. Charles Taylor, of Star City.

The table was laid with a linen and lace cloth and was centered with an arrangement of lavender chrysanthemums. The rooms of the home were decorated with white cosmos and pink roses.

Forty members of the Society and Auxiliary were present. Dr. and Mrs. C. W. Dixon, of Gould, and Dr. and Mrs. Charles Taylor, of Star City, were guests.

The Union County Medical Auxiliary began its activities for the current club season with a meeting and luncheon at the Garrett Hotel, September 29th.

Mrs. J. Murry Smith, of Smackover, presided at the meeting. Mrs. Smith and Mrs. P. H. Muse, of Junction City, were hostesses at the luncheon following.

Mrs. Muse was elected secretary to fill the vacancy created by the resignation of Mrs. Bruce Crow.

A paper on "Objectives of the Auxiliary," prepared by Mrs. Alfred Hathcock, of Fayetteville, state president, was read by Mrs. Muse. Mrs. Smith made a few remarks, concluding them with, "Great as have been the achievements of the Auxiliary in the past, these should be used as stepping stones of the future."

The Auxiliary will devote time to study of the American Medical Association platform during this winter.

Mrs. Smith announced the appointment of the following committee chairmen: education and physical health, Mrs. L. G. Fincher; press and publicity, Mrs. P. H. Muse; public relations, Mrs. A. D. Cathey and Mrs. J. M. Sheppard; courtesy, Mrs. M. V. Russell; Hygeia, Mrs. David LeVine; historian, Mrs. J. G. Mitchell; constitution and by-laws and parliamentary, Mrs. Warren Riley; legislation, Mrs. J. K. Sheppard; social and program, Mrs. Berry L. Moore and Mrs. J. A. Moore; doctor's day, Mrs. E. J. Munn; and memorial, Mrs. S. J. McGraw and Mrs. J. B. Wharton.

Chrysanthemums and dahlias in shades of yellow, gold and bronze, surrounded by fruit centered the luncheon table, and horns of plenty, filled with flowers and fruit, stood at either end of the table. Place markers were cards and small corsages.

Mrs. McGraw gave the invocation, after which the following musical program was presented: "Indian Melody" and "Love Comes Calling" sung by the Smackover High School girls trio, composed of the Misses Melba Arnold, Miriam Jones and Dorothy Lambert, to piano accompaniment by Miss Judith Marshall; and a reading by Miss Elaine Bateman. All performers were from Smackover.

Mrs. Joe Tyson, new president of the Bowie-Miller County Medical Auxiliary, was honoree at a prettily appointed coffee September 27th, at the lovely new home of Mrs. L. H. Lanier, of Texarkana. Mrs. Lanier, Mrs. J. T. Robison, Mrs. T. F. Kittrell, Dr. Frances Spinka, and Mrs. N. B. Daniel were co-hostesses.

Beautiful fall flowers were used in profusion about the house. Plate favors were "Sallie Sweets," miniature doll faces, containing a variety of sachets, the handiwork of Mrs. Lanier.

Mrs. Tyson directed a business session, when plans were made for the presentation of Dr. W. W. Bauer, of Chicago, assistant editor of Hygeia, on February 11th, and for the entertainment of visitors to the Fifteenth District Medical Society and Auxiliary meeting in Texarkana, October 8th. Luncheon will be served at noon and a tea in the afternoon. Mrs. Roy Baskett is chairman of the entertainment committee.

Yearbooks were distributed and Mrs. William Hibbitts was introduced as the new president of the Texas State Medical Society Auxiliary.

Mrs. C. H. Frank was introduced as a new member.

The Washington County Medical Society Auxiliary met at the Washington Hotel for a dinner meeting September 3rd. Mrs. Alfred Hathcock, president of the Arkansas State Medical Society Auxiliary, gave an excellent interpretation of the eight points of the American Medical Association platform.

A report was given by the Hygeia Committee and plans were made to send an extra subscription to the WPA Nursery School in Fayetteville. This makes a total of seven subscriptions which have been sent to as many schools this year. It was urged that the Auxiliary do more work toward sponsoring Hygeia this year by entering the Hygeia contest.

The Washington County Medical Society Auxiliary met at the Washington Hotel for their regular dinner meeting October 1st. The program was given by Mrs. R. H. Huntington, "The Wagner-George Hospital Bill." A lively discussion followed the program. It was voted that the Auxiliary would give six Hygeia subscriptions this year to public schools, Library, and the WPA Nursery School.

The next meeting will be at the home of Mrs. R. Miller on October 18th, and will be a work meeting.

Several of the Auxiliary members accompanied Mrs. Alfred Hathcock, president of the State Medical Society Auxiliary, and Mrs. Fount Richardson, secretary, to Little Rock on September 26th, for the Board Meeting.

The Auxiliary to the Southeast Medical Society was entertained September 23rd at the new Hospital in Dermott.

As guests arrived they were shown through the rooms in the hospital, and introduced to the young daughter

COUNTY SOCIETIES

OF THE

ARKANSAS MEDICAL SOCIETY, 1940

COUNTY	PRESIDENT	ADDRESS	SECRETARY	ADDRESS
ARKANSAS	E. B. Swindler	Stuttgart	Tom VanDuyn	Stuttgart
ASHLEY	G. W. Fletcher	Montrose	J. T. Herron	Hamburg
BENTON	J. L. Pickens	Bentonville	Geo. M. Love	Rogers
BOONE	Ulys Jackson	Harrison	J. G. Gladden	Harrison
BRADLEY	W. B. Reasons	Hermitage	W. J. Hunt	Warren
CARROLL	A. L. Carter	Berryville	W. H. Newkirk	Berryville
CHICOT	C. G. Leverett	Eudora	W. J. Schwarz	Lake Village
CLARK	H. A. Ross	Arkadelphia	Joe W. Reid	Arkadelphia
CLAY	J. P. Hiller	Pollard	J. E. McGuire	Piggott
CLEBURNE	J. T. Matthews	Heber Springs	T. C. Birdsong	Shiloh
CLEVELAND	T. L. Adams	Rison	W. G. Hancock	Rison
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of Dr. and Mrs. B. E. Barlow, the first to be born in the new hospital.

A delicious chicken dinner was served at seven o'clock in the rose tinted dining room where there were many lovely arrangements of pink and white dahlias, gifts from the friends of the hospital. The tables were centered with pink and white roses. Following the dinner a business session was held with Mrs. Chas. Dixon, of Gould, presiding.

Some correspondence was read and plans were made to attend the Board Meeting in Little Rock, September 26th. After adjourning, Mrs. B. E. Barlow and Mrs. J. T. Herron directed a quiz contest. Prizes were won by Mesdames Stewart, Smith and Keenan.

Guests for the evening were: Mrs. S. B. Nadler, New Orleans; Mrs. R. K. Keenan, Atlanta, Ga.; Mrs. Fred Hames, Pine Bluff; Mrs. M. K. Bottoroff, Lake Village; Mrs. Stewart, Little Rock, and Miss Houston, Clarksville.

While the ladies were being so delightfully entertained at the hospital, the doctors were enjoying a dinner and lectures, in the dining room of the Methodist Church.

MRS. M. C. CRANDALL,
Publicity Secretary.

Mrs. J. S. Southard was elected secretary to the Sebastian County Medical Society to succeed Mrs. Ralph Weddington, who has moved to Melbourne, October 14th, when the Auxiliary resumed its fall-winter schedule. The meeting was held in connection with a luncheon at at the home of Mrs. Ruth Moss Carroll, 400 North Greenwood Avenue. Hostesses were Mrs. M. E. Foster, president, and Mrs. W. F. Rose.

The 1940-1941 officers assumed their duties. The new president, Mrs. Foster, announced committee appointments, and the Auxiliary voted to contribute \$10.00 to the state student loan fund and to renew complimentary subscriptions to the official publication of the medical association, Hygiea, to the Girls Club, Rosalie Tilles Children's Home, Young Women's Christian Association and Carnegie Library.

Present were Mrs. I. r. Jones, outgoing president; Mrs. Southard, secretary; Mrs. S. P. Stubbs, treasurer; Mrs. A. A. Blair, Mrs. Walter Eberle, Mrs. D. W. Goldstein, Mrs. J. L. Kellum, Mrs. Everett Moulton, Mrs. S. J. Wolferman, Mrs. Carl L. Wilson and the hostesses, Mrs. Foster and Mrs. Rose. Mrs. C. H. Finney was a guest.

Committees announced by Mrs. Foster follow:

Public Relations: Mrs. Fred Krock, chairman, Mrs. A. A. Blair, Mrs. B. B. Bruce, Mrs. A. F. Hoge, Mrs. Carl Wilson.

Hygiea: Mrs. H. H. Smith, chairman; Mrs. W. R. Brooksher, Jr., Mrs. T. P. Foltz.

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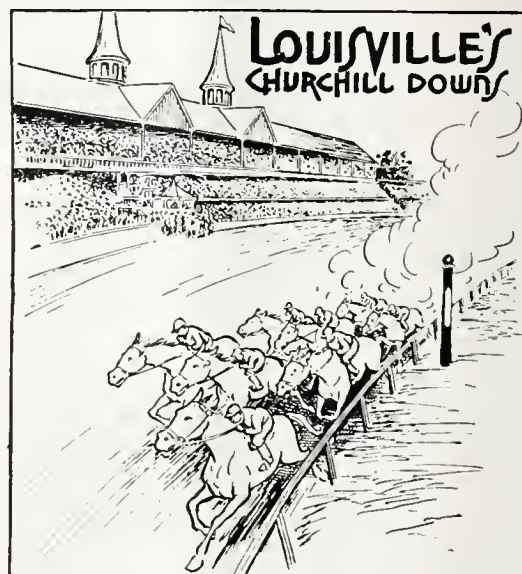
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Health: Mrs. E. C. Moulton, chairman; Mrs. C. S. Means, Mrs. S. J. Wolferman, Mrs. P. C. McConnell.

Courtesy: Mrs. D. W. Goldstein, chairman; Mrs. B. Wayne Freer.

Publicity: Mrs. W. F. Rose.

MRS. W. F. ROSE,
Publicity Chairman of the Auxiliary
Sebastian County Medical Society.



AS "the Derby" determines the winner among equestrian thoroughbreds, so each meeting of the Southern Medical Association becomes more established as a consistent winner among the thoroughbred medical meetings. See another winner when the Southern Medical Association meets in Louisville, Kentucky, November 12-15, 1940.

MEDICALLY, there may be expected the usual fine programs and entertainment that distinguish the annual meetings of the Southern Medical Association from the others. Ten general clinical sessions, nineteen sections, the three independent medical societies meeting conjointly, and outstanding scientific and technical exhibits are assurance that every phase of medicine and surgery will be available.

REGARDLESS of what any physician may be interested in, regardless of how general or how limited his interest, there will be at Louisville a program to challenge that interest and make it worth-while for him to attend.

ALL members of state and county medical societies in the South are cordially invited to attend. And all members of state and county medical societies in the South can be and should be members of the Southern Medical Association. The annual dues of \$4.00 include the Southern Medical Journal, a fine publication recognized as a valuable instrument to physicians of the South in the pursuit of their professional careers.

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BOOK REVIEWS

Gynecological and Obstetrical Pathology: By Emil Novak, A. B., M. D., D. Sc. (Hon. Dublin), F. A. C. S., Associate in Gynecology, The Johns Hopkins Medical School; Gynecologist, Bon Secours and St. Agnes Hospitals, Baltimore. Pp. 496. 427 illustrations. Philadelphia: W. B. Saunders Company, 1940.

This most comprehensive volume is of value not alone to the pathologist but to the general practitioner, the obstetrician and the gynecologist as well. Well-accepted viewpoints together with detailed anatomy and embryology are presented along with information on all the recent advances in this field of medicine. The ovarian tumors occupy a prominent place and it is doubtful if there is available elsewhere such a wealth of knowledge on these tumors as within this volume. Illustrations are carefully chosen and such references as are given add to the worth of the book.

Dr. Colwell's Daily Log for Physicians. Price \$6.00. Champaign, Illinois: Colwell Publishing Company.

This one-volume simplified accounting system for physicians has received our favorable recommendation year to year. We feel that this is the most satisfactory and desirable system available to the individual physician. It is again suggested to those of our readers who do not use it as the solution to their bookkeeping troubles.

Management of the Cardiac Patient: By William G. Leaman, Jr., M. D., F. A. C. P., Assistant Professor of Medicine in Charge of the Department of Cardiology, Woman's Medical College of Pennsylvania, Philadelphia; Cardiologist, Woman's College, Memorial, Northeastern Hospitals and Philadelphia Hospital for Contagious Disease; Consulting Cardiologist, St. Luke's and Children's Hospital, Philadelphia, etc. Pp. 650 with 255 illustrations. Philadelphia, London and Montreal: J. B. Lippincott Co., 1940, \$6.50.

Here is a book which really was written for the busy practitioner, and designed to help him in the management of his cardiovascular cases.

While there are more than 400 references in the bibliography, the book relates largely the opinion of one man based on extensive clinical and teaching experience. An interesting feature is the presentation of more than 100 illustrative cases with details of management, together with their related electrocardiograms, orthodiagrams and occasionally pathological specimens.

It is a thorough, comprehensive volume which answers well the questions, "What shall I do with that heart case?"

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(Appointments expire with annual session of the year indicated.)

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No. 7

PREMATURE DETACHMENT OF THE NORMALLY SITUATED PLACENTA *

RALPH M. SLOAN, M. D.
Jonesboro

Historically, we are told that premature placenta separation was known and reported as far back as the days of Hippocrates. Fallaciously, however, and for many centuries, all forms of pre-partum hemorrhage were ascribed to placental separation. No evidence is at hand to show that these primeval reporters even realized that a variety of implantation sites existed. Louise Bourgeoise, in 1609, is credited with having described certain pathological factors which precipitated premature separation. Some 75 years later, Paul Portal, of Paris, advanced a theory of distinction between high and low sites of implantation and thus preceded the work of Rigby, who, in 1776, distinguished between the bleeding of low implantation (placenta previa) and premature separation of a higher or normally implanted placenta.

A succession of theories as to cause can be followed along the blazed trail of changing terminology. Rigby called it "accidental hemorrhage" and implied a strictly traumatic cause. Robert Lee, 1848, applied the term "placental apoplexy." Many of the present-day writers continue to use this term now modified to read "utero-placental apoplexy," implying a gross hemorrhage basis or hemo-hydraulic ablation. "Ablatio-placenta," offered by Holmes in 1901, merely implies the recognized separation along a cleavage line; another term, "abruptio-placenta," suggested by DeLee, denotes a violent and precipitous separation and does not make allowance for those cases which are slow and insidious in development, being partial in extent and usually unrecognized by the examiner and patient. "Toxic apoplexy," or "Toxic utero-placental apoplexy," subscribes to the theory

that localized pathological lesions, the result of some toxic condition, provoke the more gross clinical results of separation. I like the term, "premature detachment of the normally situated placenta," because it defines the abnormality only in respect to time and anatomical site and not as to physiological or pathological cause. As we will note later, a true single cause is, thus far, unestablished. We, as clinicians, are more vitally concerned with **whether or not**, and **how much of** a separation has taken place, rather than what caused it, in so far as the emergency of treatment fills our hands with plenty of work when such a case falls to our lot.

Etiology

A brief resume of etiological factors, however, would not be amiss since their existence as revealed in the patient's history may improve our diagnostic accuracy. First, there is traumatism—jars, falls, blows, and violence—such as attempted external version; second, tissue changes in placenta and/or uterus such as may occur in endometritis, syphilis, infectious rheumatism, endocarditis, all toxemias of pregnancy and other focal infection states, which can be considered predisposing; third, probably a primary or secondary role played by an actually or accidentally shortened cord; fourth, by the same token, polyhydramnios, and multiple pregnancy as such may act through the explosive liquid decompression and violent traction of the cord coincident to the birth of the first twin. Winters found a high percentage occurring without any signs of toxemia present such as albuminuria, nephritis, etc. DeLee, back in 1901, offered hemophilia and other purpuric states as causes. Schumann showed an occurrence of cases in 60% of which no related toxemia could be demonstrated by careful and purposeful searches. Later, can be added (1) Vitamin K deficiency, (2) Hypercholesterolemia as a cause of infarction, (3) rupture or thrombosis of the placental artery, (4) Endocrine imbalance, (5) vitamin group deficiencies (B, C,

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 17, 1940.

D) as well as Vitamin-E-poor, and, estrogenic-rich divergencies.

Incidence

Your speaker's eyes were opened when he reviewed the records of many authors. The greatest frequency reported in all degrees of cases was 1:100, or actually 0.93%, reported by Bland and Rakoff in 1938. The other extreme quoted comes from the New York Lying-In Hospital wherein no record of such an accident occurred in 10,000 consecutive deliveries. Without reciting in detail the recorded authority and mathematical deductions I would shorten my comments on this angle of the subject by stating that the general average of 10 tabulated reports approximates 1:400 cases and this I may add is based altogether on clinically manifest cases.

Pathology

It is impossible to describe a local lesion that is pathognomonic of this condition inasmuch as its etiology is not fixed. However, to briefly recall to your mind what takes place mechanically, will serve to rationalize the mental images which we form when we find ourselves in a diagnostic role at the patient's bedside. Therefore, let us visualize at some point between the placental attachment and the corresponding uterine wall a small hemorrhage beginning either precipitously which, within a few minutes, separates all or most of this attachment, or does so **slowly and insidiously**. Alternately, it bleeds, then clots, then bleeds again; keeping itself concealed by the still attached margins of the placenta. From this start the blood earlier or later may travel in one of several directions, (1) infiltrating into and splitting the fibers of the muscular uterine wall; (2) likewise into the spaces of the placental tissue; (3) it may also rupture into the fluid cavity of the membranes; (4) it may dissect its ways between the membrane layers, or, finally by similar action make its external appearance through the cervix after coursing its way to that point between the membranes and the uterine mucosa. Other lesions some of which are not clearly established as to their primary or secondary roles are to be found in all coats of the uterus and the adnexa. The body of the uterus may show large plum-colored or purplish subperitoneal patches resembling bruises. These occasionally split and bleed. Similar discolorations may be seen in the ovaries and tubes. Endarteritic changes and lesions of the smaller vessels of the uterine muscular coat have been noted. Various degrees of hemorrhagic degeneration and necrosis have been found both

in the uterus and placenta. Since these are found also in other toxemic complications, their signal role in this condition therefore is not distinctive. My own observation of the **gross changes** in the placenta, in those portions of it which were detached previous to the third stage, was essentially that of **atrophy** as manifest by a pallid, ironed-out flatness with punctate hemorrhagic patches and spots of blood clot infiltration, the latter of which was removed with difficulty when wiped with a gauze sponge. In summary, changes are manifest whose presence can be explained by both toxic and mechanical phenomena.

Symptoms and Diagnosis

A classical syndrome of symptoms, making diagnosis easy, could be readily formulated and offered only if every case were of a fulminating nature. The dilemma here, however, is quite like any other precipitous catastrophe—that is to say, when serious complications of a diseased condition are obvious beyond all doubt, it is often too late for anything except heroic and, sadly enough, hopeless measures. Specifications for diagnosis, however, may be summarized as follows, and are more strictly applied to the cases of greater severity. A patient in the last three months of pregnancy, seized with a shocking attack of abdominal pain, followed by vaginal bleeding and continuous pain or cramps without relief, who tells you that at onset fetal movements became violent and agitated and sooner or later entirely ceased, and with an appearance of extreme shock, one must make a presumptive diagnosis of complete, or almost complete, placental separation and immediately seek to prove it. The objective signs to be sought for and investigated follow a natural sequence of reasoning. Precipitous onset means rather wide or complete separation which in turn means massive hemorrhage, which in turn means localized to generalized abdominal pain and simultaneous severe shock from hemorrhage and circulatory collapse. Whether or not the hemorrhage appears externally through the vagina is irrelevant to the emergency at hand. If anything, a massive concealed hemorrhage adds treachery and misguidance to the indication for immediate treatment. Therefore, as will be shown later under treatment, the prime policy for the mother is control of hemorrhage and restoration of all physiological losses resultant therefrom. The hemorrhage of placenta previa is generally painless, without uterine disturbance of motility, is bright red and essentially free of clots. The hemorrhage of premature separation, when and

if it does appear, is practically always dark, well clotted or viscid in consistency. It may occasionally occur that the first appearance of the hemorrhage would be a pinkish serum expunged from the massive concealed clot by the contracting forces of uterine tetany. In a doubtful case, distinction should be carefully made between this and ordinary bloodstained liquor amnii. Blood pressure, if previously high due to known related conditions or due to a toxemic state of pregnancy, will fall in response to the hemorrhage loss. Pallor, clammy perspiration, thirst, air hunger, and all other signs of shock will be present. Laboratory check up by blood count will show a startlingly low anemia secondary to the hemorrhage with probably a normal color index. A white cell and differential count will practically always show a high to abnormally high leukocytosis (14 to 30 thousand) and the ordinary shift in cell types. One patient of mine on first examination showed 1,750,000 red cells and 35% hemoglobin with a color index of exactly one. Inspection of the abdomen will show, if by fortune it had been previously observed, a much larger and higher uterus which gives a flat appearance on top, i. e., anteriorly and bulging flanks in a manner similar to the ascitic abdomen. Palpation gives one a distinct bit of information that to me is peculiar and different from all other similar accidents of pregnancy. It presents a state of general tetanic contraction devoid of the relaxations of normal labor. It has a wooden or ligneous—"cork"—feel of its musculature, and probably will not reveal a **single movement** of the fetus, which, in three-fourths of the cases, is by that time dead. Palpation will show tenderness locally over the site of hemorrhagic separation, or, if further advanced, generally over the whole now infiltrated uterus. There is ample distinction with which to differentiate the contractions of normal labor, the relaxation of placenta previa, and other prepartum accidents. Vaginal examination may or may not show that labor has begun. Labor usually begins within a few or twenty-four hours after onset. This is indeed fortunate if the separation has reached a reasonably severe degree.

Treatment

I would like to discuss treatment in an anti-climatic order, beginning with the **most severe** case. Unquestionably this and all other cases should be immediately hospitalized since operative procedures, both minor and major, are always invaluable, or will likely be so in a matter of a few hours. The single item needing both

haste and adequate treatment is maternal shock and is exceedingly important, be the hemorrhage concealed or open. A quick inventory of all indicative signs of shock and collapse should dictate this. Granted that the case is severe, it is appalling, but nevertheless true, to state that little or no time should be given at the outset to any measure pertaining to salvage or reinforcement of chances for the fetus. The fetus will have already succumbed to asphyxia by virtue of a massive or overwhelming detachment, or, it will yet do so before one can deliver the mother by any **safe and sane** procedure. If hospitalization is absolutely prohibited, the best improvised method of combating shock and collapse, and early delivery, must be instituted. Our present-day intravenous solutions can be quickly transported to the bedside and may suffice momentarily until actual blood transfusion, in itself indispensable, can be provided.

Upon hospitalization immediate provision for infusion of blood and fluids should be done. Of standard solutions available, ten to twenty per cent dextrose in saline is chosen and can be made continuous in administration if necessary. Acacia and other effective substitutes for blood volume may be used in accordance with the preferences of the attendant. Morphine should be administered immediately both to allay pain and to combat shock. After such emergency measures are instituted, time should then be taken to consider and institute a method of choice for emptying the uterus. In the order of their popularity, I will enumerate the procedures as they are tabulated by those who choose and champion them. First, caesarean section—quite obviously sufficient recovery from shock is necessary to make a fit risk for operation in the face of the fact that labor is not sufficiently started nor progressed enough to effect as quick a delivery from below. Certainly, if the cervix is not effaced or if effaced but not dilated, caesarean section should be indicated. If when sectioned, the uterus shows blood infiltration, hematomas, and the like, a quick supra-vaginal hysterectomy should follow delivery of the fetus. If less impairment of the uterine tissues is present and it yet retains reasonably good contractility, its cavity should be filled snugly with gauze packing since even in the mildest cases involvement of the musculature will have impaired contractility to the extent that continued hemorrhage may result and thereby hamper post-operative treatment for blood loss and shock. In a **border-line decision** relative to **uterine impairment**, hysterectomy should be done because necrosis

and degeneration of the infiltrated areas may provoke infection and peritonitis causing mortality from that end after all of one's emergency procedures had reasonably predicted success.

Second choice would be delivery from below. Rupture of membranes may induce a quick labor. Some say this relieves intra-uterine counter pressure and allows a close application and compression of the bleeding site by uterine contraction upon the fetus. Accouchement force, if ever acceptable, might be so here. **Hystereuryesis**, or, induction by bags with traction, may be used, but is not frequently chosen. Packing the vagina and lower cervical segment, has been offered as a choice. This is basically the same as the so-called "Rotunda treatment" of Dublin, designed for induction in the home. It has virtually been discarded, even by the original designers. So much for the inductions.

Hastening the second stage of labor may be elected. Here forceps, version (?), even craniotomy on a known dead fetus may be attempted. I could find no mention of cervical incision in the texts and literature and still wonder if this might not be adaptable after thinning of the cervix has been accomplished by beginning labor.

The elective procedures in the treatment of a moderate to mildly severe case offers the greatest challenge to our judgment. To qualify what I mean by such a case, I would say briefly that this case has more than insignificant separation and hemorrhage as manifest by threatened shock, relative anemia, and leukocytosis, is not pallid nor pulseless, radial pulse is perceptible and of fairly good volume, is not air-hungry and not in too great pain and discomfort. Such a case would probably show continuation of fetal life, even though such may be impaired. Examination would reveal a not too tender uterus, and a uterus which yet retains its ability to alternately relax and contract even though its tone may be markedly increased over normal. External hemorrhage in this case may be small but diagnostically distinguishable by its old dark clotty appearance. Such a case may have all hemorrhage entirely concealed and retained. Treatment of a case as above described would be a choice between (1) section, (2) rapid induction of labor, or even (3) watchful expectancy with the normal hope that labor will ensue and complete itself within twenty-four hours. I would not favor section unless it could be shown that hemorrhage is progressing as noted by lowering blood pressure, rising pulse and increasing complaints, and confirmed by a changing blood picture; or un-

less uterine motility had ceased as a result of increasing hemorrhagic filtration. It is well to note here that the uterine musculature becomes more and more refractory, not only to artificially administered oxytocics, but to its own natural qualifications in this respect. It is probably not so much the lack of oxytocic response but a local inertia of the muscle fibers themselves. In such a state, therefore, it is powerless to complete the first and second stages of labor unless the fetus is so premature or so small as to admit of an easy expulsion. One of my own cases, in so far as I was able to discern, expelled her seven months and two weeks fetus by the essentially unassisted voluntary forces of her abdominal musculature.

Watchful expectancy on the other extreme is somewhat fraught with the danger of being left at the post by a precipitous and renewed massive hemorrhage and separation which would catch the accoucher napping and totally disarm him of his scalpel for section or his needle for voluminous transfusion. The happy medium of elective treatment in this case would be to begin a discreetly chosen form of induction and not let up on the fluid infusion and mildly dosed sedatives. Statistics again remove a great hindrance to our careful decisions. By that I mean that 80 to 90% of all fetuses will not have survived beyond this point. It appalls us also to realize that 35% to 50% of all such mothers succumb to this accident irrespective of prompt diagnosis and reasonably prompt attention.

I will say little here concerning the treatment of the mild case, granting that one can always recognize it when it occurs without external hemorrhage. We undoubtedly would choose a program of watchful waiting and symptomatic relief. In such a case massive hemorrhage has not seriously threatened. One will always find, however, much more of the symptoms of shock than are justified by organic impairment. Uterine tetany, fetal death, perhaps external hemorrhage will not be present to aid in diagnosis.

Essential medical aids may here be tried in an effort to salvage the case and carry it to term. Progestin in oil, 1 to 2 units daily, to neutralize Braxton Hicks contractions and halt thinning of the lower uterine segment—or, Vitamin E for estrogenic imbalance as advised by Schute—or, Vitamin K for hemorrhage after Stewart and Rourke—or, Polok's Spanish windlass binder to compress the abdomen (omitting vaginal packing and induction). I, being without proper opportunity, have tried none of these latter measures.

I failed to state in considering the **labor-inducted** case or the **spontaneously-delivered** case that one must be alert for further hemorrhage in the post-partum interval. After placenta delivery it is commonly advised to always pack the uterus from below with long strip gauze whether hemorrhage is continuing at that time or not. Remember that you are now denied the aid of artificial drugs to control post-partum hemorrhage from this source. After delivery one must continue to treat the patient to restore all losses. Further transfusion, administration of iron and liver should continue. If associated with and complicated by toxemia, nephritis, etc., special treatment directed to this end must continue. One then expects phlebitis or venous thrombosis either in the pelvis or lower extremity, or both, to complicate these cases in a frequency above the normal rate. One case of mine developed, after delivery, a large and mildly tender mass in the left pelvic space which extended up beyond the iliac crest on that side. I was never sure whether this was a confined thrombosis or an organized hematoma free within the peritoneal cavity, which, according to some writers and observers, could easily have hemorrhaged from a ruptured sub-peritoneal lesion on the uterus. I rather think it was the latter complication. I was fortunate enough to observe that the mass slowly subsided, as though by absorption, in two or three weeks.

In closing I would like to repeat that which I subscribe to in belief as I found it offered by one author. Namely, that many accidents reported by all of us simply as complete or incomplete abortions or miscarriages in the earlier months of pregnancy, are actual premature separations of the normally situated placenta, provoked by one of the various causes described earlier in this paper. Of these causes I feel that toxic injury at the site of placental implantation is surely the most common offense.

My humble conclusions are in summary as follows:

(1) Premature placental separation is more frequent than previously thought.

(2) Toxic influence rather than trauma, mechanics or idiopathic hemorrhage, is the most frequent cause.

(3) Advanced cases are not too difficult to diagnose. (Less advanced cases are, inversely, more difficult.)

(4) All undoubtable cases should be hospitalized and treated with fearful respect and eager emergency in order that at least maternal mortality rates might be lowered.

(5) No new effective management has been firmly established although many recent advances promise worthiness and need further confirmation.

WARNS PHYSICIANS OF SWINDLING BY PEDDLERS OF NARCOTICS

"From the Bureau of Narcotics in Washington comes a warning from the Commissioner, Mr. H. J. Anslinger, which should be widely disseminated among physicians and their families," The Journal of the American Medical Association for Nov. 23, reports. "Illicit traffickers in narcotics have in some instances recently developed a technic with which they were able to swindle either the widows or members of the families of physicians who had recently died. Apparently these peddlers watched the daily papers for the notices of deaths of physicians. Shortly after the publication of such a notice of death the trafficker appeared and represented himself to be 'a narcotic appraiser,' stating that he represented a federal agency and seeking to induce the survivors of the physician to turn over to him whatever narcotics might be found among the effects of the deceased. Thus far attempts have been made only on the families of physicians. It seems probable, however, that a similar attempt might be made in connection with stocks of narcotics held by druggists. Physicians and druggists everywhere should be warned against this type of fraud."

CHRISTMAS SEALS



*Help to Protect Your
Home from Tuberculosis*

FOREIGN BODIES IN THE FOOD AND AIR PASSAGES *

PAUL L. MAHONEY, M. D., and JOHN S. AGAR, M. D.
Little Rock

In former years endoscopy was used for little else than the removal of foreign objects in the food and air passages. Although its scope has been greatly broadened to encompass the field of early diagnosis of lesions in the larynx, tracheo-bronchial tree, esophagus, and stomach we are still confronted with the problem of foreign bodies and especially with the neglected ones.

Peroral endoscopy is a term applied to the examination under direct vision of the larynx, tracheo-bronchial tree, esophagus, and stomach.

Instruments have been devised to enable the operator to examine these regions and remove foreign material that has been aspirated or swallowed. The esophagoscope or bronchoscope consists of a rigid tube lighted at the distal end with a small globe. Variations of these instruments exist with proximal lighting facilities, and we find it necessary to have both kinds, each having its particular field of usefulness.

The technique of removal of foreign bodies will not be discussed in this paper for this is a highly specialized procedure.

The bronchi and the esophagus will not safely allow dilatation beyond their normal caliber; therefore, it is necessary to have tubes of various sizes to fit these passages at various ages. Rupture of a bronchus or of the esophagus is almost invariably fatal, so the choice of the diameter of the instrument used is as vital as the proper skill and knowledge in using the instrument.

In studying the anatomy of the food and air passages the endoscopist is struck with the wide variation which he encounters, even if the anatomy be considered within normal limits. For this reason, at times, the passage of a bronchoscope or esophagoscope is an extremely difficult procedure even under ideal conditions.

The ventricular bands, or false cords, form the roof of the ventricle which is a concave space between these bands and the true cords. Below the true cords the subglottic region is filled with loose tissue and approaches the midline as it goes lower. This lumen, therefore, is wedge-shaped and is designated the conus elasticus. Because the tissues in the subglottic region are very vascular there are two points we must keep in mind: one the necessity for gentleness during bronchoscopy to avoid trauma which might

cause sufficient swelling that a tracheotomy be required; secondly, the importance of low tracheotomies, for high in this region the introduction of a tracheotomy cannula would almost inevitably lead to a chronic laryngeal stenosis.

The right main bronchus is shorter, wider, and more nearly vertical than the left and is practically a continuation of the trachea. The bronchi elongate and expand during inspiration; shorten and contract during expiration. It is this elasticity and resiliency that makes bronchoscopy possible.

In a consideration of the anatomy and physiology of the esophagus, the one point of paramount importance is that this structure will stand less trauma than any other in the body. The walls are extremely thin; so thin, in fact, that the dulllest bougie, if introduced blindly, is easily passed through them without the operator being aware of any resistance.

There are four demonstrable constrictions of the esophagus which are from above downward: 1. The cricopharyngeal pinch cock; 2. The crossing of the aorta; 3. The crossing of the left bronchus; 4. The diaphragmatic pinch cock, or hiatus esophagus. There is a fifth narrowing of the esophagus not seen in esophagoscopy and not seen during dissection but readily shown functionally by the fact that most foreign bodies lodge at this point. This narrowing occurs just below the cricopharyngeus muscle and at the superior aperture of the thorax and is probably produced by the crowding of the numerous organs which enter or leave the thorax through this entrance. Closure of the esophagus at the cricopharyngeal pinch cock is tonic and constant.

Foreign Bodies Most Frequently Encountered in Esophagus

Adults	Children
1. Bones	1. Coins
a. Chicken	2. Toys
b. Beef	a. Whistles
c. Squirrel	b. Jacks
d. Fish	c. Parts of toys
2. Dentures	3. Safety Pins
3. Miscellaneous	4. Miscellaneous

The accompanying cut will give some idea of the kinds of foreign bodies that have been removed over a period of years here in our clinic. It is apparent that in studying the objects herewith pictured that carelessness must necessarily have played an important part in their being aspirated or swallowed. For this reason parents should be cautioned not to allow small children to play around any easily available foreign

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

bodies. Children in rural districts are allowed to play in corn cribs and on floors littered with hulled beans, watermelon seeds, and peanuts. This fact accounts for the high percentage of foreign body cases from the country.

An extremely wise precaution for all men who operate around the head is to inspect carefully the teeth before inserting a mouth gag, removing all loose deciduous teeth, for there are numerous cases on record where loose teeth have been knocked out and aspirated.

As physicians we owe it to the public to teach the parents of children suspected of having aspirated a foreign body that the possibility of its spontaneous expulsion by coughing is extremely remote and that its continued sojourn in the lung daily renders its removal more difficult and the pathology resulting from its presence worse.

At this time it may be noted that in our experience that an adult with a history of having swallowed any large bone, beef, chicken, squirrel, almost invariably still has his foreign body lodged usually just below the level of the cricopharyngeal constriction and an esophagoscopy is indicated early. On the other hand, those with the history of having swallowed a fishbone and if a careful mirror examination of the tonsils, base of the tongue, and pyriform sinuses fails to reveal the bone, it is safe to defer esophagoscopy for several days, for in passing the cricopharyngeal constriction small sharp bones of this nature scratch the mucous membrane and produce the sensation of the bone itself remaining.

In adults who have a narrowing of the esophagus lumen either because of an organic stricture or because of cardio spasm we occasionally have to retrieve large pieces of meat or other compact masses of foodstuff, which have been insufficiently masticated and hurriedly swallowed. Unless one is vigilant in preparing food and in chewing, the presence of dentures obviates the detection of a foreign body until it is swallowed.

If a foreign body lodges in the larynx, one or more of the following symptoms may be present: hoarseness, croupy cough, aphonia, odynphagia, hemoptysis, wheezing, dyspnea, cyanosis, apnea, subjective sensation of a foreign body. The majority of our laryngeal foreign bodies have been cockle burrs, nut shells, etc. Cockle burrs in the larynx produce a marked hoarseness and irritation of the larynx, but surprisingly few subjective symptoms.

Many foreign bodies remain in the trachea. These may be diagnosed by listening at the open mouth of the patient for the asthmatoïd wheeze. With the stethoscope one may hear the foreign

body playing loosely in the tracheal lumen; and either at the open mouth with the unaided ear or over the trachea, we note the auditory slap when the foreign body is brought into contact with the subglottic region.

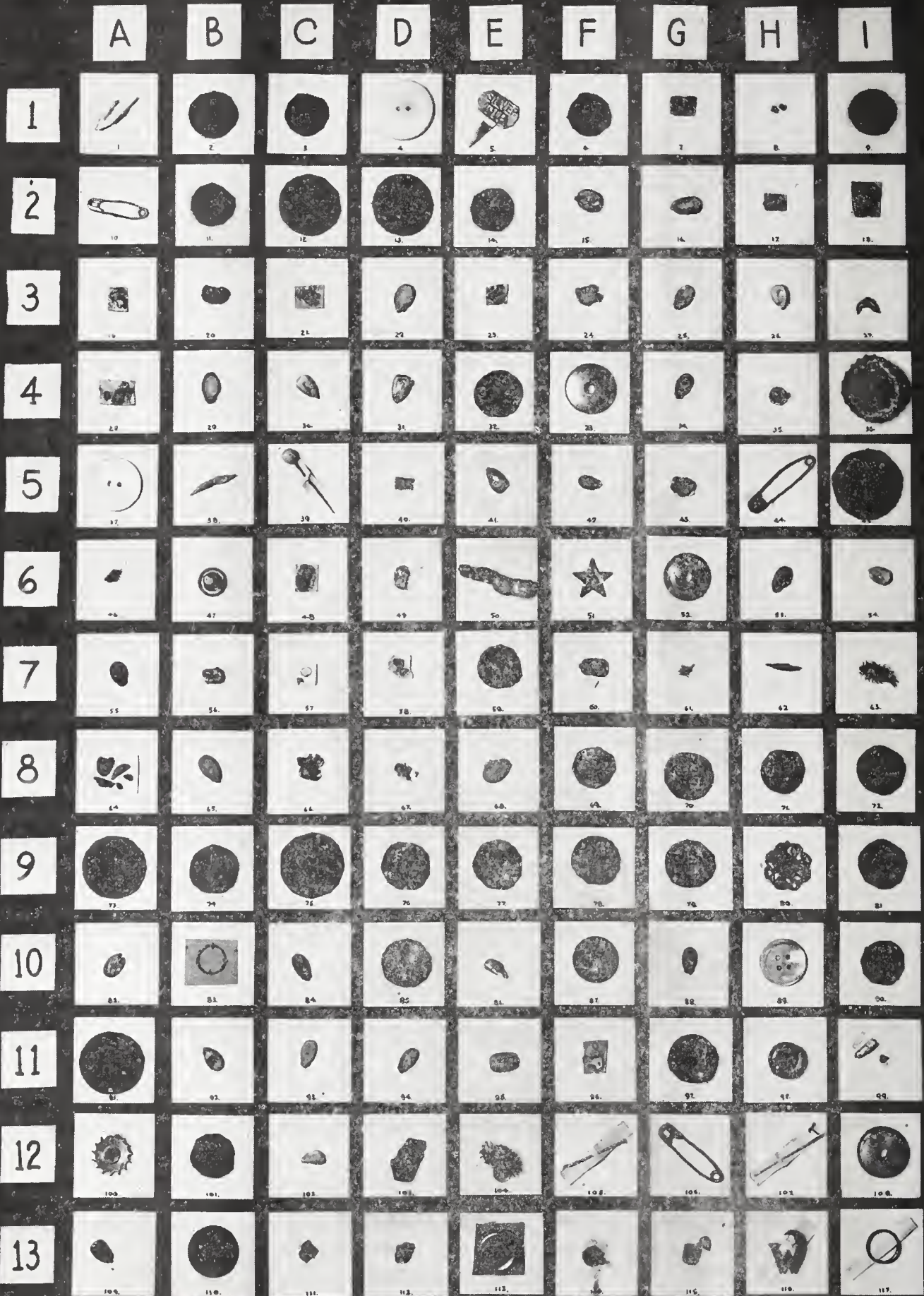
Foreign bodies in the bronchi almost invariably have the history of a sudden onset with violent coughing, cyanosis, dyspnea.

There is practically always a symptomless interval between the initial symptoms caused by aspiration of a foreign body and the onset of the later symptoms due to secondary changes in the lungs, unless the foreign body is large and remains in the trachea. This interval, which varies with the type of foreign body, is the chief cause of overlooked foreign bodies. It is not due to the inability of any practitioner to diagnose foreign bodies in the lungs, but to either his failure to elicit a history of the precise nature of the onset of the disability or his being lured into a false conclusion by the inevitable symptomless period.

Non-obstructive metallic foreign bodies produce few signs or symptoms for weeks or even months. The action of the tissue juices and secretions on the metal produce what is known as the galvanic effect which inhibits bacterial growth.

Obstructive foreign bodies cause atelectasis, drowned lung, and eventually pulmonary abscess. Lobar pneumonia is an exceedingly rare sequel. Vegetable foreign bodies; such as, beans, peanuts, etc., cause very soon a laryngo-tracheo-bronchitis with toxemia, cough, and irregular fever. The roasting process almost completely removes the essential oils from nut kernels; hence, a roasted nut does not cause the intense irritation of the bronchial mucous membrane that a raw nut does.

Any obstruction to ventilation and drainage lowers the defensive power of the lung which results in the natural passages becoming filled with secretions and pus. This condition is known as drowned lung in contradistinction to abscess in which there is a pathological cavity. There are many authors who claim that the removal of foreign bodies which have already been present long enough to produce abscess and bronchiectasis will result in a high percentage of cures of the lung pathology. It has been our experience that most large abscess cavities fail to close even with continued bronchoscopic and postural drainage; and ultimately, to preserve the health of the other lung tissue, either open drainage of the abscess or lobectomy, if the concomitant bronchiectasis is extensive, becomes



These objects were removed from food and air passages

FIGURE I

1-a 1-inch Bone	4-c Corn	7-e Penny	10-g Watermelon Seed
1-b Nickel	4-d Corn	7-f Corn	10-h Button
1-c Penny	4-e Nickel	7-g Sandburr	10-i Penny
1-d Button	4-f Whistle	7-h 1-inch Metal Sliver	
1-e Tobacco Tag	4-g Watermelon Seed	7-i Cocklebur	11-a Quarter
1-f Penny	4-h Thumb Tack		11-b Watermelon Seed
1-g Piece of Peanut	4-i Ginger Ale Top	8-a Pieces of Peanut	11-c Watermelon Seed
1-h Eggshell—6 mo. baby		8-b Watermelon Seed	11-d Watermelon Seed
1-i Nickel	5-a Button	8-c Peanut	11-e Corn
	5-b Bone	8-d Piece of Wood	11-f Piece of Peanut
2-a 1-inch Safety Pin	5-c 1½-inch Pin	8-e Watermelon Seed	11-g Nickel
2-b Penny	5-d Piece of Wood	8-f Dime	11-h Whistle Top
2-c Quarter	5-e Corn	8-g Nickel	11-i Piece of Corn
2-d Quarter	5-f Watermelon Seed	8-h Penny	
2-e Nickel	5-g Bean	8-i Nickel	12-a Clock Wheel
2-f Corn	5-h Safety Pin		12-b Penny
2-g Corn	5-i Half Dollar	9-a Quarter	12-c Bean
2-h Peanut Hull		9-b Nickel	12-d Pecan Hull
2-i Pieces of Peanut	6-a Sandburr	9-c Quarter	12-e Cocklebur
	6-b Collar Button	9-d Nickel	12-f Straight Pin
3-a Pieces of Peanut	6-c Piece of Peanut	9-e Nickel	12-g Safety Pin
3-b Piece of All-Day Sucker	6-d Piece of Peanut	9-f Nickel	12-h Needle
3-c Pieces of Corn	6-e Bridgework	9-g Nickel	12-i Whistle
3-d Watermelon Seed	6-f Tin Star	9-h Piece of Brooch	
3-e Peanut	6-g Whistle	9-i Nickel	13-a Corn
3-f Bone	6-h Watermelon Seed		13-b Foreign Money
3-g Watermelon Seed	6-i Corn	10-a Corn	13-c Piece of Tooth
3-h Corn		10-b Metal Ring	13-d Piece of Peanut
3-i Peanut Hull	7-a Watermelon Seed	10-c Watermelon Seed	13-e Whistle
	7-b Corn	10-d Nickel	13-f Thumb Tack
4-a Pecan Hull	7-c Eggshell	10-e Half Grain of Corn	13-g Pieces of Peanut
4-b Watermelon Seed	7-d Peanut	10-f Slug	13-h W-Pin
			13-i Metal Ring

necessary. In the cuts shown are two cases of post-foreign body abscess now in the hospital in Little Rock, on whom we may have to advise lobectomy. We, however, show one large abscess that healed after bronchoscopic and postural drainage.

Because of its rounded shape a bean acts as a ball valve and completely shuts off the air below its location, the residual air is absorbed, the bean is pulled in more tightly, atelectasis increases, and if the bean is located near the bifurcation in young children, both lungs become obstructed and death results. Jackson states that beans are the most often fatal of foreign objects.

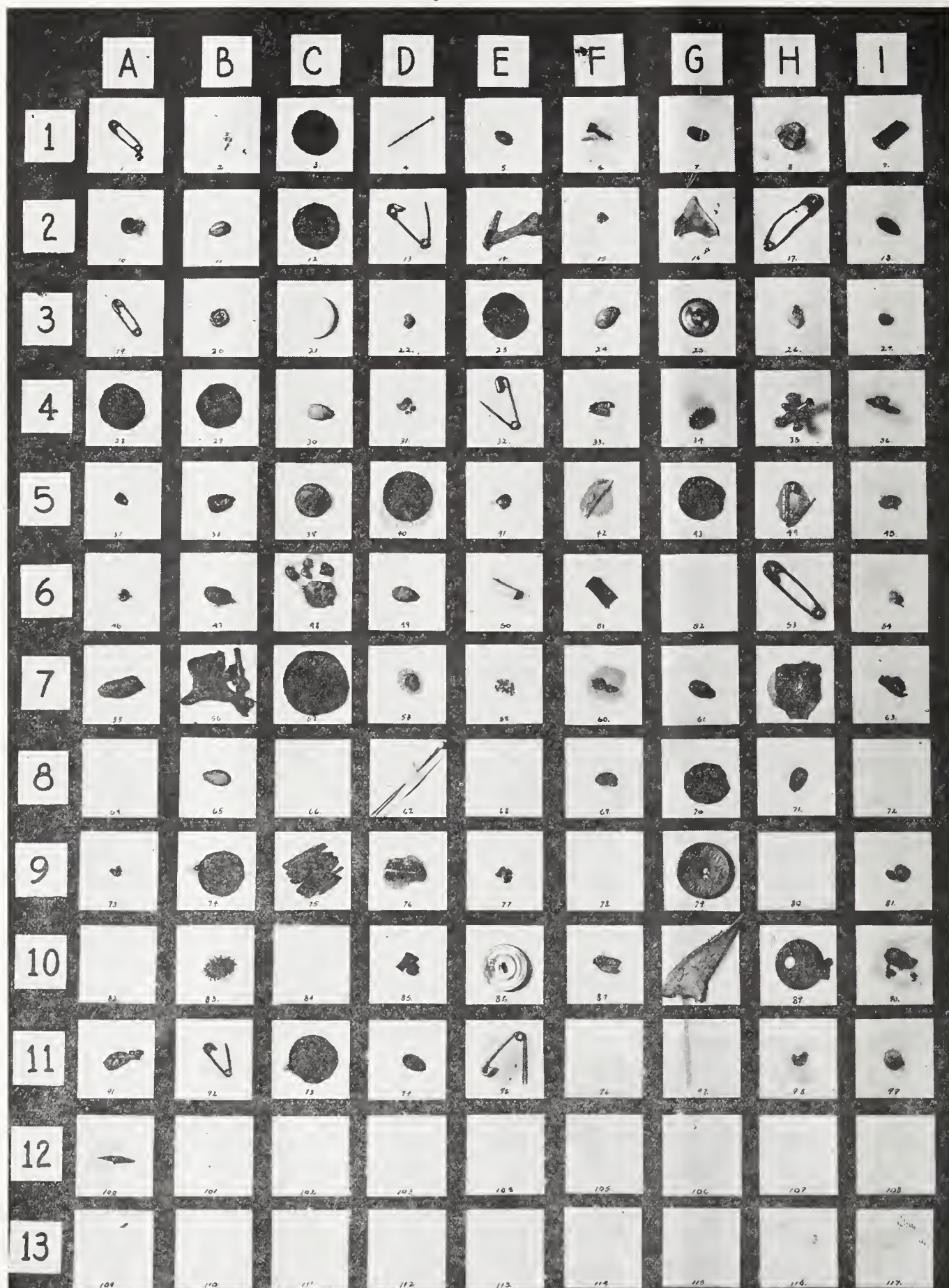
Inorganic bodies after varied lengths of time produce changes which cause chills, fever, sweats, emaciation, clubbed fingers, incurved nails, foul expectoration, and hemoptysis; in fact, all the symptoms of chronic pulmonary sepsis, abscess, and bronchiectasis. These symptoms and some of the physical signs may suggest pulmonary tuberculosis, so it is of the utmost necessity that we exclude a possible foreign body in every acute or chronic chest case.

The physical signs vary with conditions present in different cases and at different times in the

same case. The foreign body may shift to a lower position in the same lung causing more obstruction or may even move to the opposite lung. To interpret the signs it is necessary to remember there are three kinds of obstruction: 1. By pass valve obstruction like a partially closed valve; 2. Check valve obstruction in which the air passes in but not out (emphysema); and 3. Completely shut valve in which the air cannot pass either in or out, the retained air becoming absorbed (atelectasis).

The most nearly characteristic physical signs are: 1. Limited expansion; 2. Decreased vocal fremitus; 3. Impaired percussion note; 4. Diminished intensity of the breath sounds distal to the foreign body. Complete obstruction of a bronchus followed by drowned lung adds absence of vocal resonance and vocal fremitus, thus often leading to an erroneous diagnosis of empyema. Early in a foreign body case, diminished expansion of one side with dullness may suggest pneumonia in the affected side; but absence of, or decreased, vocal resonance and absence of typical tubular breathing should soon exclude this diagnosis.

The X-ray is of paramount importance in the diagnosis of foreign bodies in the tracheo-



These objects were removed from food and air passages

FIGURE 2

1-a Safety Pin	4-a Penny	7-a Peanut	10-a
1-b Pieces of Corn	4-b Nickel	7-b Bone	10-b Cocklebur
1-c Penny	4-c Corn	7-c Nickel	10-c
1-d Straight Pin	4-d Pieces of Corn	7-d Pieces of Corn	10-d Pecan Hull
1-e Peanut	4-e Open Safety Pin	7-e Pieces of Corn	10-e Button
1-f Tack—1/2-inch	4-f Piece of Corn	7-f Piece of Bone	10-f Peanut Hull
1-g Bean	4-g Cocklebur	7-g Watermelon Seed	10-g Chicken Bone
1-h Corn	4-h Jack	7-h Bone	10-h Top of Key
1-i Cartridge Cap	4-i Piece of Bone	7-i Pecan Hull	10-i Bean
2-a Brad	5-a Piece of Peanut	8-a	11-a Pecan Hull
2-b Corn	5-b Corn	8-b Watermelon-Seed	11-b 1-inch Safety Pin
2-c Nickel	5-c Collar Button	8-c	11-c Nickel
2-d Safety Pin	5-d Quarter	8-d 2 1/2-inch Pin	11-d Watermelon Seed
2-e Chicken Bone	5-e Peanut	8-e	11-e 1 1/2-inch Safety Pin
2-f Piece of Peanut	5-f Bone	8-f Piece of Bean	11-f
2-g Piece of Bone	5-g Nickel	8-g Penny	11-g
2-h Safety Pin	5-h 1/2-inch Safety Pin	8-h Watermelon Seed	11-h Pecan
2-i Watermelon Seed	5-i Piece of Bean	8-i	11-i Sandbur
3-a Safety Pin	6-a Carpet Tack	9-a Pieces of Hull	12-a Piece of Bone
3-b Snap	6-b Kidney Bean	9-b Dime	12-b
3-c Button	6-c Accumulated Calcium from Lung	9-c Piece of Cane	12-c
3-d Corn Hull	6-d Watermelon Seed	9-d Cartridge Cap	12-d
3-e Penny	6-e Piece of Cup Handle	9-e Piece of Peanut	12-e
3-f Corn	6-f Cartridge Cap	9-f	12-f
3-g Metal Button	6-g	9-g Whistle	12-g
3-h Corn	6-h Safety Pin	9-h	12-h
3-i Corn	6-i Pieces of Peanut	9-i Peanut	12-i

bronchial tree and the more widespread use of this procedure in any obscure chest case will clarify many otherwise baffling conditions. It is important to stress that in the event the X-ray is negative a diagnostic bronchoscopy should be done in all cases of unexplained bronchial obstruction. In the diagnosis of non-opaque foreign bodies it is necessary to remember the three kinds of bronchial obstruction and to get the evidence on the film; exposures must be made at the end of complete expiration and at full inspiration.

Obstructive emphysema must be distinguished from compensatory emphysema in which the ballooning is in the unobstructed lung, because it must perforce do all the work if there is a complete obstruction of the main bronchus on the opposite side. Obstructive atelectasis occurs when the obstruction is complete, the air below the obstruction is absorbed, the lung collapses, and the heart and mediastinum move over to satisfy the partial vacuum.

Although it is desirable for obvious reasons to remove any foreign body from the tracheo-bronchi or esophagus as soon as possible, it does not justify the sacrifice of orderly preparation. There is no branch of surgery that demands closer cooperation and teamwork than in endoscopy. For this reason, except in very unusual cases, the

patients are hospitalized for a sufficient length of time for adequate study and the assembly of the operating team.

We have mentioned previously under anatomy of the esophagus the extreme delicacy of this structure. Because of this and the fact that most foreign bodies which lodge in the esophagus are sharp pointed, the removal of an object is attended with considerably more danger than removing one from a bronchus. In addition, in the case of a child, more rarely in an adult, pressure forward on the "party wall" will cause marked dyspnea. The laryngeal cartilages of a child are so elastic that death may occur from asphyxiation. The presence of an enlarged thymus also materially decreases the lumen of the esophagus and increases the danger of esophagoscopy.

There are no constant physical signs associated with an uncomplicated foreign body in the esophagus. If perforation of the cervical esophagus has occurred, subcutaneous emphysema results; if perforation in the thoracic portion, extreme toxicity with chills, fever, and rapidly progressive mediastinitis. Pulmonary symptoms may occur as a result of ulceration of the foreign body into the trachea or bronchi or because of obstruction in the esophagus. Trauma to the larynx either instrumental or digital in an attempt to

remove a foreign body will cause laryngeal symptoms.

The most constant symptom in esophageal foreign bodies is the subjective sense of its presence. Immediately following the lodging of the object, there is usually choking, retching, vomiting, and coughing. Dysphagia is usually present. Pain, substernal or radiating to the back, may or may not be described. Dyspnea may be present if the foreign body is large enough to compress the trachea. X-ray examination will reveal the presence of a metallic foreign body. Even though the X-rays are negative, if the patient has a history of having swallowed an inorganic substance, many times esophagoscopy is done with a foreign body retrieved. We have on several occasions removed bones from the esophagus that one would ordinarily consider to be radio-opaque which did not show up on the X-ray film. This is an important point to keep in mind when a patient presents himself with the history of having swallowed a bone.

The danger of retained foreign body in the esophagus is much less than ill-advised or hasty attempts at its removal. Blind bouginage to push it into the stomach cannot be condemned too strongly, for perforation of the esophagus wall will almost inevitably occur.

Esophagoscopy is demanded in every case where there is known to be, or there is a suspicion of, a foreign body in the esophagus. The most common site of lodgement is in the physiological narrowing at the place where the esophagus enters the thorax just below the powerful cricopharyngeus muscle.

See foreign body 7-B-2 (56); 2-E-5 (14); 10-G-7 (88); 7-H-8 (62).

Most patients will point just above the sternal notch when asked to locate the position of the foreign body. If the foreign body has gone deeper it is unlikely to produce subjective sensation. Most foreign bodies of any kind may be retrieved from this upper constriction, for the danger of perforation into the mediastinum is slight if working above the sternal notch. Open safety pins with point up, however, below the sternal notch had much better be pushed into the stomach under direct vision and their course followed fluoroscopically through the gastrointestinal tract. There have been many ingenious and elaborate instruments devised for turning an open safety pin, cutting of the point, shielding the point, but so far the safest method for the child is to push the whole pin into the stomach. We have observed a number of pins

disposed of in this manner and have yet to see a complication resulting from its passage through the bowels.

The removal of foreign bodies from the food and air passages is a major procedure and patients should be impressed with its seriousness. Endoscopic mortality is low if there is proper teamwork and an adequate instrumentarium.

In closing we wish to quote from Jackson "errors to avoid in suspected foreign body cases."

1. Do not reach for the foreign body with the fingers; lest the foreign body be thereby pushed into the larynx, or the larynx be thus traumatized.

2. Do not hold up the patient by the heels, lest a tracheally lodged foreign body be dislodged and asphyxiate the patient by becoming jammed in the glottis.

3. Do not fail to have a roentgenogram made, if possible, whether the foreign body in question is of a kind opaque to the ray or not.

4. Do not fail to search endoscopically for a foreign body in all cases of doubt and especially in cases of bronchial obstruction.

5. Do not pass blindly an esophageal bougie, probang, or other instrument.

6. Do not tell the patient he has no foreign body until after roentgen-ray examination, physical examination, indirect examination, and endoscopy have all proved negative. Even then it is well to have him return for re-examination after an interval.

We have supplemented this list with a few admonitions to ourselves and our fellow doctors.

1. Haste makes waste, so the immediate extraction of a foreign body is rarely necessary (except in complete laryngeal or tracheal obstruction) until a proper operating room setup can be effected.

2. Endoscopic examinations are major procedures and patients must be instructed to expect hospitalization.

3. Foreign bodies, especially open safety pins point up, below the level of the sternal notch in most cases are more safely disposed of by pushing them into the stomach.

4. X-ray films taken immediately before endoscopy are necessary because of a possible shift in location of the foreign body.

Finale

The history is all important and if we will only be patient and listen, the most illiterate parent will most often tell us exactly what is wrong.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

A STUDY of tuberculosis among students at Lund University in Sweden by Hedvall and Malmros calls attention to the great risk of tuberculosis confronting young people and describes an excellent procedure for mass surveys of students. Of special interest is the discovery that the high incidence of tuberculosis among medical students was traced to the postmortem examinations during their course in pathology. Abstracts of the study follow:

INCIDENCE OF TUBERCULOSIS AMONG UNIVERSITY STUDENTS

Pulmonary tuberculosis is characterized by an insidious protracted course and a prolonged absence of clinical symptoms. When such symptoms finally appear, the lung changes have frequently spread extensively in one or both lungs. It is essential, therefore, that pulmonary tuberculosis should, if possible, be diagnosed before the appearance of morbid symptoms.

Examination Procedure

On registration all students are required to come to the Student's Tuberculosis Bureau for an examination. On the first visit a careful history is taken, a tuberculin test by the Pirquet method and a sedimentation test are made, together with a fluoroscopic and radiographic examination. If the tuberculin test is negative, the students are retested by the Mantoux method with from 0.1 up to 1. mg. tuberculin. Only those who do not react to the 1. mg. dosage are considered negative.

A re-examination of all students is made at least once a year following the same procedure of the original examination, with the exception of the X-ray examination and this is done every third year. However, an X-ray is taken when the previous history, rate of sedimentation or fluoroscopic examination indicates something suspicious or when greater caution is necessary for some other reason. When the tuberculin reaction changes from negative to positive an X-ray is taken every third month during the first year after the primary infection and every six months during the second year, even if no changes have been demonstrated. On the other hand, if any changes are observed they are followed by means

of X-rays at intervals of a few weeks or months, irrespective of expense.

Altogether 3,336 persons were examined; 638 were medical students, 1,367 philosophy students, 409 theology students, 488 law students. To these were added 434 probationary nurses at the South Sweden School for Nurses. They were included in order to obtain a comparison with the medical students since both these groups are undoubtedly exposed to a certain risk of tuberculosis infection.

Results of Survey

Among those examined, 133, or approximately 4%, were found to have active tuberculosis. Of the 133 cases, (a) 47 were tuberculin-negative and had normal lung X-rays when entering the University or School for Nurses; (b) 43 had been infected at some period of their lives, since they were tuberculin-positive on first examination but were radiologically sound and (c) the remaining 43 were tuberculin-positive and did not show a normal X-ray picture of the lungs on first examination. Some of these already had tuberculosis but others did not develop it until later.

In general, the tuberculous changes were progressive and significant. Of the 47 who showed no evidence of tuberculosis on entrance, there developed 14 cases of pulmonary tuberculosis as well as cases of erythema nodosum, exudative pleurisy, tuberculous peritonitis, and miliary tuberculosis, with two deaths.

Of the 43 in the second group who were tuberculin-positive but radiologically sound on first examination, 37 developed pulmonary tuberculosis, 2 tuberculosis of the hilar lymph nodes,

and 4 pleurisy. One of the cases of pleurisy developed pulmonary tuberculosis as a complication and died.

Of the 133 cases of tuberculosis found in the period from 1930 to the end of the 1937 Spring term, 110 were among the University students and 23 among the nurses. Ninety-five students and 15 nurses are at present fit for work. Of the other cases, 9 have died, 5 are unfit for work and 9 are still at the sanatorium.

It is of interest, however, not only to know the number of cases found and how they developed, but also the frequency of the disease in the different groups, as shown in the table:

	No. of Persons Examined	No. of Cases of Tuberc. Found	Percentage
Medical students	638	72	11.3
Philosophy students	1,367	17	1.2
Theology students	409	12	2.9
Law students	488	9	1.8
Nurses	434	23	5.3

These figures indicate that both medical students and probationary nurses are exposed to a considerable risk of tuberculous infection.

Medical Student Incidence Studied

During the first year, no case of tuberculosis was found among the medical students. In the second year 4 cases were detected and during the third to fifth year 10 cases each year. From the sixth to the ninth year only 6, 4, 2 and 1 cases respectively were diagnosed. Thus, most of the tuberculous cases were discovered during the third to fifth year of study, a period which coincides with the last course before and the first courses after the beginning of the practical training at the hospital. Since the medical students live under practically the same conditions as other students at the University, the high tuberculosis morbidity among them must be due to a risk of infection to which they alone are exposed.

Quite a number of the medical students are primarily infected before they begin their hospital training course and, therefore, some course taken before this training must be significant. The medical students themselves have for a long time suspected that the course in general pathology taken before the hospital duty, and lasting one year, constitutes a danger of tuberculous infection. In at least 16 cases, there is a significant connection between the course of general pathology and the appearance of the primary infection. In the other cases the primary infection occurred either before or after the

pathological course, during the training at the hospital.

The infection acquired during the course in pathology may have originated from fellow-students or physicians. The probability of this happening was, however, carefully excluded. For this reason, thorough and repeated examinations of the autopsy rooms were made for the presence of tubercle bacilli. Samples were taken from towels, trays, dust on the autopsy tables and in the rooms and it was found that in spite of all precautions during the postmortem examinations, tubercle bacilli were discovered when an examination was made 24 hours after a necropsy examination of a person with pulmonary tuberculosis. In addition to guinea pig inoculations, suitable cultural experiments were made to obtain a quantitative idea of the presence of tubercle bacilli on the objects and in the rooms examined.

As a result of these examinations, more stringent precautions in disinfecting the autopsy rooms were taken and finally it was agreed, at least for the present, to limit the necropsy examinations of tuberculous patients as much as possible. The results of the latter step are as yet available only for two terms. Nevertheless, examinations showed that for the first time all tuberculin-negative reactors at the beginning of the course, were also negative at the conclusion of the course. The investigation is being continued and the definite result awaited, but the authors feel they are justified in expressing the view that excessive tuberculous morbidity among medical students can be reduced by taking special precautionary measures against tuberculous infection in hospitals and in rooms in which necropsy examinations of tuberculous subjects are performed.

The Incidence of Tuberculosis Among Students at Lund University, Erik Hedvall, M. D., *Amer. Rev. of Tuber.*, Vol. XLI, No. 6, June, 1940.

TUBERCULOSIS AMONG COLLEGE STUDENTS

During 1937-1938 over 64,000 students were given tuberculin tests with 25.8% showing positive reactions. Since 1932-33 when the first figures were collected there has been a steady increase in the number of tests and a slow but steady fall in the percentage of reactors. "The value of the tuberculosis program to the individual student, whether he be the patient or the protected, is incalculable," reports the Committee. "The effort of finding tuberculosis is justified by the educational value alone. It is a demonstration of how lives can be saved and the community safeguarded. This is hygiene that actually operates." *Annual Rep. Tuber. Com. of Amer. Student Health Assn.*, 1937-1938.

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EDITORIALS

FARM SECURITY PROGRAM OF
MEDICAL CARE

Information has been received from the state
office of the Farm Security Administration that
some changes have recently been made with
respect to increases in loans to families in certain
low income counties of the state for participation
in the group medical program. This variation
in amount of loans in different counties has been
the source of some criticism by the physicians,
although the administrative agency advised it
was effected through a desire to base the loans
on the abilities of the clients to repay.

The lower rate of \$8.00 per family plus \$1.00
per member will now be raised to \$10.00 per fam-
ily plus \$1.00 per member in all those counties
wherein the lower rate was formerly in force.

Another change which should be of benefit is
that fees for major surgery will henceforth be
prorated with the hospital fees, instead of with
the fees of the physicians in each county. The

deduction for these fees has caused a low pay-
ment in many instances and the change should
act to give a higher percentage of payment for
the ordinary medical services. The administra-
tive agency has further agreed that, if funds
available for major surgery and hospitalization
are insufficient to pay a reasonable minimum fee
for such services, that requests will be made for
grants in sufficient amounts to bring the pay-
ment up to a minimum fee basis. In order that
the full benefit may accrue from these grants,
it will be necessary to restrict major surgery and
hospital cases to such services as are necessary
to save life or limb and to exclude all chronic
and incurable diseases.

The Farm Security Administration offers these
changes in an effort to bring about a greater
satisfaction by the medical profession. The
Journal takes this opportunity to ask that the
Chairman of the special committee from the
Council on this plan of medical care, Dr. Clyde
McNeil, Rogers, be fully advised at all times of
the operation of the plan within the respective
counties of the state. The cooperation of county
medical society secretaries and councilors is
especially desired in this respect.

MEDICAL PREPAREDNESS QUESTIONNAIRE

On November 12, 1940, nearly four months
after the medical preparedness questionnaire of
the American Medical Association were first
mailed to the physicians of Arkansas, there re-
mained 378 of the physicians of Arkansas who
had failed to complete and mail this form. The
reason for such indifference and lethargy by the
medical profession in a matter which vitally con-
cerns not only national defense, but the indi-
vidual physician himself, is most difficult of un-
derstanding. Repeatedly these physicians have
been contacted by letter, many of them in
person, but such efforts have been unsuccessful.

Again, it is emphasized that the individual
physician owes an obligation to his country and
to himself to complete in full this simple form
and to return it to the American Medical Asso-
ciation, or preferably to the Arkansas Medical
Society. If returned to the state society, it be-
comes possible to form a more accurate check of
those yet delinquent in this duty.

A final effort is being made through the
various county society committees on medical
preparedness to secure completion of these
forms by every physician in Arkansas. The help-
ful cooperation of all physicians will be most
appreciated in this endeavor.

PROCEEDINGS OF SOCIETIES

The Independence County Medical Society met in dinner session at Batesville, November 11th. Drs. Burton and Hawkins, of Searcy, discussed "Diagnosis and Treatment of Pellagra" and "Vaginal Discharge," respectively. The Society voted to offer ten dollars on the county tuberculosis association essay contest.

J. J. Monfort, Secretary.

The Lawrence County Medical Society was addressed November 12th by C. C. Ball, Raven-
den, on "Gastric Ulcer."

T. C. Guthrie, Secretary.

The Benton County Medical Society met in dinner session at Rogers, November 14th, with Drs. McNeil and Hodges presenting a symposium on "The Uterus" and Geo. M. Love discussing "Non-Open Reduction of the Patella."

Geo. M. Love, Secretary.

The Third Councilor District Medical Society met in Helena, October 24th, for the following afternoon program: "Indications and Uses of Sulfanilamide, Sulfapyridine and Sulfathiazol," Lyle Motley, Memphis; "Vitamin Therapy," D. T. Hyatt, Little Rock; "Allergic Dermatitis," Allan G. Cazort, Little Rock, and "Medical Preparedness," W. R. Brooksher, Fort Smith. The banquet session at the Helena Hospital was addressed by Downey L. Harris, Saint Louis, "Rabies." Officers elected are: President, A. W. Cox, Helena; Vice-President, J. O. Rush, Forrest City, and Secretary-Treasurer, Milton C. John, Jr., Stuttgart. The Society will next meet at Forrest City during April.

The Crawford County Medical Society met at Van Buren, October 22nd, with John L. Ruff, new district health officer, making a talk.

B. B. Bruce, Secretary.

The Mississippi County Medical Society was addressed on November 5th by Battle Malone, Memphis, "Penetrating Wounds of the Abdomen," and by J. Harley Harris, Memphis, "Tonsillectomy."

F. D. Smith, Secretary.

The annual President's dinner of the Pulaski County Medical Society honoring H. T. Smith, McGehee, was held at the Albert Pike Hotel, Little Rock, November 20th.

Prairie County Medical Society has elected the following officers: President, W. J. B. Williams, Des Arc; Vice-President, Edward Adams, Hazen; President-Elect, J. R. Lynn, Hazen; Secretary-Treasurer, J. C. Gilliam, Des Arc; Delegate, J. C. Gilliam, and Alternate, Edward Adams.

The Ouachita County Medical Society met in regular monthly session at the Ouachita Hotel in Camden, November 7th. After a banquet the following program was rendered: "Some Points on Thyroid Surgery," Dr. Joe Heard, Shreveport; "Some Pitfalls in the Treatment of Diabetes," Dr. A. A. Herold, Shreveport, and "Allergic Diseases" (A movie), Lederle Laboratories.

R. B. Robins, Secretary.

M. J. Kilbury, Little Rock, recently addressed the Pope-Yell County Medical Society on "Useful Laboratory Equipment."

The Lawrence County Medical Society was addressed October 8th by Paul Stroud, Jonesboro, on "Spastic Colitis."

The annual banquet session of the Union County Medical Society, November 6th, was addressed by N. D. Buie, Marlin, Texas, on "The Platform of the American Medical Association," and Marvin T. Green, Ruston, Louisiana, on "Non-malignant Conditions of the Breast."

The Arkansas State Nurses Association was addressed at its recent meeting in Fort Smith by Chas. T. Chamberlain, "The Iron Lung"; Fred H. Krock, "Fractures"; I. F. Jones, "The Importance of Prenatal Care," and A. A. Blair, "Nursing Care of Diabetics."

OBITUARY

ADOLPHUS G. CLYNE, age 85, died at his home near Paragould, October 21st, after a long illness. Born in St. Thomas, Ontario, came to Greene county in 1881 and graduated from the Louisville Hospital College of Medicine in 1889. He served as third vice-president of the Arkansas Medical Society in 1904. He was a member of the American Legion, of the Odd Fellows, of the Knights of Pythias, and of the Baptist Church.

PERSONALS AND NEWS ITEMS

F. Walter Carruthers, Little Rock, was elected Chairman of the Section on Bone and Joint Surgery of the Southern Medical Association at the Louisville meeting.

Frank G. Engler, Little Rock, is taking post-graduate work in New York.

H. T. Smith, McGehee, and J. D. Riley, State Sanatorium, will serve as first and second vice-chairmen, respectively, for the 34th annual Christmas Seal sale in Arkansas.

W. A. Craig, Eudora, has recovered from an illness which necessitated hospitalization in Little Rock.

S. W. Douglas, Eudora, addressed the Spanish-American War Veterans at Hot Springs National Park, October 8th, on "Sanitation in Army Camps in 1898."

E. F. Ellis, Fayetteville, has donated his medical library to the University of Arkansas School of Medicine. This is a collection of more than 1,000 volumes with extensive files of medical periodicals in addition.

J. S. Kolb was honored on the occasion of his seventy-sixth birthday at Clarksville recently.

Dr. and Mrs. H. H. Smith, Fort Smith, spent a November vacation in New Orleans.

F. Walter Carruthers, Little Rock, has been reappointed a member of the Arkansas Crippled Children's Commission.

T. P. Foltz, Fort Smith, recently attended clinics in New Orleans.

The Arkansas School Board Association has elected the following officers: President, H. B. Hardy, Greenbrier; Member of Executive Committee, J. G. Gladden, Harrison.

C. Lewis Hyatt, Little Rock, has been appointed 1st Lieutenant, Medical Corps, Arkansas National Guard, and assigned to the 153rd Infantry.

MARRIED—On October 19th, Hoyt R. Allen and Mrs. Martha Branham of Little Rock at Benton.

Ellery C. Gay, Little Rock, addressed the recent meeting of the Arkansas Society for Crippled Children in Pine Bluff.

MARRIED—On October 26th at Prairie Grove, Jeff J. Baggett and Miss Frances Gose.

R. B. Robins, Camden, addressed the Fifth Councilor District (Louisiana) at Bastrop, Louisiana, November 19th, on "Head Injuries."

H. Fay H. Jones, Little Rock, attended the Southwest Section of the American Urological Association in Denver during October and subsequently visited the urological clinics of the University Hospital, Iowa City, and the Mayo Clinic.

J. B. Jameson won the President's Cup at the Camden Country Club, November 3rd, with a net score of 69.

W. B. Grayson addressed the Pulaski Heights Lions Club, October 28th.

L. K. Hundley, Little Rock, addressed a conference of health directors and nurses at Fort Smith, November 5th, on "Trachoma."

Jos. F. Shuffield, Little Rock, has been elected president of the Arkansas State Fox Hunters Association.

Ralph E. Crigler has been elected president of the Fort Smith Kiwanis Club.

Dr. and Mrs. I. F. Jones, Fort Smith, spent a November vacation in New York, Philadelphia and Washington.

Ruth Ellis Lesh, Fayetteville, has been elected a Fellow of the American College of Surgeons.

L. T. Evans has been elected treasurer of the Batesville Rotary Club.

A recent Social Workers Conference in Fort Smith was addressed by T. P. Foltz, "Socialized Medicine and Its Relationships to Social Work and Social Workers," and I. F. Jones, "The NYA Health Program."

Dr. and Mrs. J. F. John, Eureka Springs, visited the Great Smokies and other points in Tennessee and North Carolina during October.

G. R. Siegel, Clarksville, has been appointed International Counselor of Lions International.

F. H. Jones, Piggott, was elected president of the November Scottish Rite class at Little Rock.

In attendance at the American College of Surgeons and the Clinical Congress of Surgeons in Chicago during October were: R. B. Robins, Camden; A. D. Cathey, B. L. Moore and Jos. B. Wharton, Jr., El Dorado; E. F. Ellis, Ruth Ellis Lesh, and P. L. Hathcock, Fayetteville; W. F. Adams, T. P. Foltz, and A. F. Hoge, Fort Smith; W. W. Chamberlain and A. H. Tribble, Hot Springs National Park; E. J. Stroud, Jonesboro; H. Fay H. Jones, Little Rock; J. W. Wilson, Magnolia; H. E. Mobley, Morrilton; A. S. Buchanan, Prescott; M. C. Hawkins, Jr., Searcy; Allen Collom, R. R. Kirkpatrick, and W. Decker Smith, Texarkana.

In attendance at the Oklahoma City Fall Clinics during October were: I. G. Jones, DeQueen; C. S. Means, Fort Smith, and Robert Hood, Russellville.

The following were registered at the Louisville session of the Southern Medical Association: John S. Agar, Little Rock; Sam J. Allbright, Searcy; Hoyt R. Allen, Little Rock; E. E. Barlow, Dermott; B. A. Bennett, Little Rock; W. R. Brooksher, Fort Smith; F. Walter Carruthers, Little Rock; Alan G. Cazort, Little Rock; W. W. Chamberlain, Hot Springs National Park; C. A. Churchill, Batesville; K. W. Cosgrove, Little Rock; S. P. Cromer, Little Rock; Paul L. Day, Little Rock; J. K. Donaldson, Little Rock; F. A. Gray, Batesville; W. B. Grayson, Little Rock; Fred W. Hames, Pine Bluff; F. P. Hardy, Searcy; W. B. Harrell, Jr., Little Rock; Alfred H. Hathcock, Fayetteville; J. B. Jameson, Camden; M. J. Kilbury, Little Rock; R. M. Kelly, Sheridan; A. C. Kolb, Hope; Jerome S. Levy, Little Rock; T. G. Porter, Hazen; D. A. Rhinehart, Little Rock; Fount Richardson, Fayetteville; J. H. Sanderlin, Little Rock; Euclid M. Smith, Hot Springs National Park; H. T. Smith, McGehee; D. B. Stough, Jr., Hot Springs National Park; L. T. Taylor, Star City; A. H. Tribble, Hot Springs National Park; H. King Wade, Hot Springs National Park; S. J. Wolfermann, Fort Smith, and W. T. Wootton, Hot Springs National Park.

W. G. Eberle has been appointed a member of the Fort Smith Housing Authority.

Brooks Teeter, Russellville, recently addressed the Pre-Med Club of Arkansas Tech.

The clinic building of J. A. Saliba at Blytheville has been completed.

R. E. McLochlin, Little Rock, attended the sessions of the Association of Medical Directors in Boston and later attended clinics in New York City during October.

Awards in the Scientific Exhibit of the Louisville session of the Southern Medical Association were: Third award, Drs. Paul L. Day, William J. Darby, and K. W. Cosgrove, Little Rock, for their exhibit on xylose and galactose cataract, and Honorable Mention to Fred Hames, Pine Bluff, for his exhibit on moulages of malignant and other lesions.

Pat Murphey, Little Rock, has been elected president of the Arkansas Society for Crippled Children.

A. M. Washburn, Little Rock, addressed a recent meeting of Food and Drug Inspectors in that city.

MARRIED—Marvin T. Crow, of Pine Bluff, and Miss Kathryn Sue Martin, of Warren, November 27th.

The following participated in the Louisville session of the Southern Medical Association: J. K. Donaldson, Joe H. Sanderlin, and William B. Harrell, Jr., Little Rock, Scientific Exhibit—"New Method of Suspending Uterus by Use of Peritoneoscope"; Fred Hames, Pine Bluff, Scientific Exhibit—"Moulages of Malignant and Other Lesions," and Paul L. Day, William J. Darby, and K. W. Cosgrove, Little Rock, Scientific Exhibit—"Xylose and Galactose Cataract"; Jerome S. Levy, Little Rock—Discussion of paper in Section on Gastroenterology; D. A. Rhinehart and B. A. Rhinehart, Little Rock—Paper, "Experiences With Protracted Roentgen Therapy of Malignancies, Particularly of the Head and Face"; Fred Hames, Pine Bluff—Paper, "Accurate Placement of Radon Seed by Suture Method"; F. Walter Carruthers, Little Rock—Discussion of paper in Section on Bone and Joint Surgery; Glenn H. Johnson, Little Rock—Discussion of paper in Section on Gynecology; Henry G. Hollenberg, Little Rock—Discussion of paper in Section on Railway Surgery; Paul Mahoney and John Agar, Little Rock—Paper, "Allergic Ear Manifestations"; W. B. Grayson, Little Rock—Chairman's Address, Section on Public Health, "Housing Facilities for Local Health Units," and K. W. Cosgrove, Little Rock—Paper, "Trachoma Problems in Arkansas."

RANDOM THOUGHTS OF THE SECRETARY

October 10th. To a well-attended postgraduate course where Earle Hunt reports (again) on the sneezing girl, the therapeutic results to date being 50%, but interesting to the assemblage. Spending a good part of our day securing completion of questionnaires, especially thankful to Monfort who goes out of his way to get the one remaining form from Independence County Society. Returning by bus, affording much opportunity to study human nature along the way.

October 13th. With Amis we go to the cabin far from the beaten path in the woods where Krock off hies himself as well and with Peggy doing well at broiling the steaks with unique equipment of kerosene stove and skillet, a good time is had by all. To our considerable dismay, we consistently miss the target with our own .22, finally retiring from the sport in favor of Amis and the young son.

October 14th. Taking on Earle Hunt whom we had thought would furnish his Mercury as transportation but who demonstrated an unexpected Scottish trait, we journey forth to Batesville where the Second District does itself proud. Noting that Wyatt's chest has been relieved of some of its former load we wonder if such could be possible for us.

October 21st. Today Chamberlain speaks to the nurses in convention assembled on "The Iron Lung," some sort of an autobiography, we assume.

October 22nd. This noon in conference with the NYA officials, Prexy Hull doffing his dignity for joviality as he can so delightfully do, and our contribution consists in suggesting ways and means of receiving bids, evidently our illustration having been a recent actuality from the mirth which it arouses in the official family.

October 27th. This afternoon through the Ozark National Forest, Cass to Ozone to Clarksville, departing too late to view the later miles by daylight but promising ourself a return trip in the opposite direction. This is one of the more beautiful forest drives in Arkansas, one you will enjoy we are certain. For our panorama collection we have in mind one which must be present from the heights south of Ozone overlooking Clarksville but which was denied us this time because of darkness. We suggest a bit of boosting for this drive by the Johnson County Boosters and the Graphic.

November 3rd. Again we view the "Ice Follies," our pet entertainment and we thrill to Bobby and Ruth, now starred, but ever our delight in the "Swing Waltz" number. Heinie Brock seems funnier than ever and the precision chorus is something for the military to see. On our recommendation, we urge you not to pass this by if the occasion offers—our unqualified approval as the most beautiful entertainment ever and cheap at three times the price.

November 5th. And it is Roosevelt for a continuing term. We feel that all physicians may well recall his statements at the opening of the National Institute of Health where he said that the confidence of the people should not be disturbed by any attempts to destroy that faith in the medical profession. A further statement was to the effect that compulsory health insurance was not needed in any plan for the economic future of the American people. The profession may well bear in mind, however, that there must be no slackening of our efforts to continue medicine as an independent profession. After all, the setting for this speech does not augur that absolute freedom of action is henceforth guaranteed the

medical profession. Let us strive to better our own standards; endeavor to provide for a better distribution of medical service to all the people; further our research; be firm in our belief that ours is still the right to organize for the enforcement of ethics and a better service to our country.

November 7th. Lake Fort Smith, the gayety of summer gone and the trees in somber hue, is most lonely as we arrive to broil a steak and let the scene have a bit of laughter, of which it appears, much as the whole world, greatly in need.

November 9th. The great and the near great flock to Fayetteville for another Homecoming, attired this day more for duck hunting than for football but a merry crowd at that, muddy shoes and dampened headgear to the contrary. Duel Brown missing with his breezes today. The sad news overcome, there is much of enthusiastic palaver at the Washington until, at a late hour, we bid Sid and Elizabeth goodbye as they get an early start for Louisville.

November 12th. Enroute to Louisville we note the numbers of folks along the Rock Island who get aboard to ride to the next town, making it almost a street car trip. Just what these folks are to do when the new streamliner starts next week, cancelling all day trains, we think should deserve more careful consideration from the railroad. No highway service of note is available from Ola to Little Rock, and there's no room for boasting over that from Mansfield to Ola. Reading in that erudite Southern Medical Journal that the Tenth Councilor District had a "delightful" program at Fayetteville, omitting, as it were, all mention of the flowers and lace cloth on the table. At Little Rock, we are joined by Hoyt Allen, King Wade, and Walter Carruthers for the ride to Memphis. At Memphis we meet King, Jr., a worthy son destined to be a credit to the profession.

November 13th. Alighting, fortunately, from the proper side of the train at Louisville, on the opposite flows the Ohio River, we establish ourselves for the sessions of the section which has been our greatest responsibility the past ten months. About the floor meeting Kolb, Grayson, Euclid Smith, President Smith, Delmas Kitchen, our most removed member, Jerome Levy, and many another from more distant points. To the open meeting tonight where there should have been a time limit on speeches but was not and thence visiting with many a dignitary with the Lockwoods, Castles, Wolfermanns and Rhineharts, realizing that Kentucky hospitality may be all they claim for it but we have been blessed in this world with the friendship of those who know its real meaning. Departing the intellectual company of Pediatricist Horton Casparis in a one-arm lunchroom in the morning hours, able to call the day a happy one.

November 14th. Breakfast late with Kilbury this morning. With the chairman's announcement that Lockwood and Rhinehart are on the nominating committee, we get set to ride out Chamberlain's ribbing that we had ourselves elected section secretary again as it must inevitably be. Today we see Fount Richardson walking the floor to make a decision and are naturally astounded. Pleased over the program, at that, and determined to present a better one, if possible, at Saint Louis. Prepared to depart by rail, we make a last round of farewells and are influenced to remain over and return by car with the Wolfermanns. Taking advantage of the new opportunity, we disport ourself in the English Room of the Brown Hotel as no Englishman would.

November 15th. Sid's seven o'clock departure was an unfilled promise, so at one we move forth with Sid

at the wheel and with us as navigator, a duty we perform well indeed for the 900 odd miles home, all heckling to the contrary. At Horse Cave, we eat a combination lunch-dinner and take leave of Kentucky where it is well said that "slower clocks strike happier hours." Tonight at Paris, Tennessee (today we have passed through both Russellville and Clarksville afar from home), the thermometer drops to 18 and the steak in a lonely cafe really tastes good. And on to Memphis where we park for the morning that is now here.

November 16th. Across the home state today, greeting the Porters of Hazen as we depart Memphis. During the early afternoon listening by radio to Yale vs. Princeton and to Arkansas vs. S. M. U., wondering, then indignant, at that type of football technic which insists upon a forward pass deep in home territory, a heresy in our long-ago days of quarterbacking, events of today serving but to confirm this teaching.

November 19th. Jess Little comes to town, on good turn bent, relieving the sheriff of a considerable headache as produced by one mentally abnormal jail inmate.

November 20th. To the President's banquet of Pulaski County Society which is preceded by a session of the Council. Inching our way from Levy to Main and Markham, we ponder the prosperity that must now be Little Rock's and naturally assume that this county society will report a 100% payment of the 1941 membership by March 1st on this occasion. Counting this as one of the meetings of the year, pleased to hear of Byron Bennett's trip along the Columbia River this summer, recommended by us; of Bob Robins' visit to the neighboring Louisiana Council meeting and apologizing for failure to move Watson from Haskell to Little Rock, of which we were fully advised. Homeward, with much less traffic hindrance and the solace of our own thoughts.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

STATEMENT FOR MEDICAL PERIODICALS

The Woman's Auxiliary to the American Medical Association is making a special effort at this time to awaken wide-spread interest in its activities, by increasing the number of readers of the Bulletin.

This little booklet is a successor to the News Letter which for many years has kept the officers and board members acquainted with the progress of the Auxiliaries of all the states. It is published quarterly and contains reports of conventions, places of work, inspirational messages from leaders, and news of the hour in the medical world.

It is a great help in promoting interest in local Auxiliaries, especially where the program is new.

The Fall issue contains the inaugural address of Mrs. V. E. Holcombe, the National Auxiliary president. Also a message to women from Dr. Van Etten, president of the American Medical Association. Many other interesting items are to be found within its forty pages. It is hoped to have 6,000 women, one-fourth of the membership, reading the Bulletin before the year is over. In this way the members may keep abreast of the trends in the medical world and be better able to function as members and leaders of the Auxiliaries in local, state, and national.

Mrs. Alfred Hathcock of Fayetteville, President of the Woman's Auxiliary to the Arkansas Medical Society, spoke October 11th to the Jefferson County Auxiliary, outlining the purpose of the organization and the service that can be rendered by members. Mrs. Fount Richardson of Fayetteville, secretary, was also present for the meeting which was held at the home of Mrs. Virgil Payne.

In talking to the members Mrs. Hathcock said: "We are organized as Auxiliary members in order to march shoulder to shoulder with our husbands, through unselfish efforts to eradicate disease by health education and legislation."

As important phases of the work, Mrs. Hathcock stressed self-education, public health education, public relations, the dissemination of healthful information, and the presentation of aims of the medical profession.

Continuing she said: "There are many other important phases of our work, such as student loan funds, legisla-

tion, the Bulletin, library fund, exhibits, cancer control, doctors' day observance, and others."

"All in all," she continued, "to be a real true member in every sense of the word, we list these five qualities: The urge to inquire, intelligent curiosity; the unselfish willingness to serve intelligently; always conscious of what can be put into Auxiliary work to make it better; a participator instead of a spectator; a person idealistic, altruistic, with aspirations; and friendliness."

Mrs. Hathcock and Mrs. Richardson were honor guests at luncheon in the Payne home following the meeting.

Mrs. J. S. Southard was elected secretary (of the Auxiliary) to the Sebastian County Medical Society to succeed Mrs. Ralph Weddington, who has moved to Paragould, Monday, October 14th, when the Auxiliary resumed its fall-winter schedule. The meeting was held in connection with a luncheon at the home of Mrs. Ruth Moss Carroll. Hostesses were Mrs. M. E. Foster, president, and Mrs. W. F. Rose.

The 1940-41 officers assumed their duties. The new president, Mrs. Foster, announced committee appointments, and the Auxiliary voted to contribute \$10 to the state student loan fund and to renew complimentary subscriptions to the official publication of the Medical Association, Hygeia, to the Girls Club, Rosalie Tilles Children's Home, Young Women's Christian Association, and Carnegie Library.

Present were Mrs. I. F. Jones, outgoing president; Mrs. Southard, secretary; Mrs. S. P. Stubbs, treasurer; Mrs. A. A. Blair, Mrs. Walter Eberle, Mrs. D. W. Goldstein, Mrs. J. L. Kellum, Mrs. Everett Moulton, Mrs. S. J. Wolferman, Mrs. Carl L. Wilson, and the hostesses, Mrs. Foster and Mrs. Rose. Mrs. C. H. Finney was a guest.

Committees announced by Mrs. Foster follow: Public Relations, Mrs. Fred Krock, chairman; Mrs. A. A. Blair, Mrs. B. B. Bruce, Mrs. A. F. Hoge, Mrs. Carl Wilson, Hygeia, Mrs. H. H. Smith, chairman; Mrs. W. R. Brooksher, Jr., Mrs. T. P. Foltz. Telephone, Mrs. W. F. Adams, chairman; Mrs. H. C. Dorsey, Mrs. C. S. Holt, Mrs. J. L. Kellum. Program, Mrs. Charles T. Chamberlain, chairman; Mrs. Walter Eberle, Mrs. J. E. Stevenson. Health, Mrs. E. C. Moulton, chairman; Mrs. C. S. Means,

Mrs. S. J. Wolferman, Mrs. P. C. McConnell. Courtesy, Mrs. D. W. Goldstein, chairman; Mrs. B. Wayne Freer. Publicity, Mrs. W. F. Rose.

Mrs. Alfred Hathcock, of Fayetteville, president of the Arkansas Medical Auxiliary, was guest of honor when the Sevier County Medical Auxiliary entertained at luncheon in the home of Miss Eleanor Park. Other state officials were Mrs. Ralph Cross, of Texarkana, third vice-president and chairman of Hygeia; Mrs. Fount Richardson, of Fayetteville, secretary; and Mrs. Pierre Redman, of Mena, parliamentarian.

The regular monthly meeting followed luncheon with the visitors taking part on the program.

The Woman's Auxiliary to the Sevier County Medical Society met Tuesday afternoon, October 15th, at the home of Mrs. C. E. Kitchens, with Mrs. G. L. Kimball, president, presiding. The group voted to make a contribution to the library fund for tuberculosis hospitals, a movement sponsored by the Arkansas Medical Society Auxiliary and in which all women's organizations in the state are asked to cooperate. To date almost \$500 has been raised for this worthy cause, directed by Mrs. T. Duel Brown, of Little Rock. Organizations wishing to aid in this project may send cash or check to Mrs. B. A. Bennett, Treasurer, Arkansas Medical Society Auxiliary, Little Rock, or to Mrs. C. E. Kitchens, DeQueen.

Beginning with the November meeting the Sevier County Medical Society Auxiliary will hold its meetings on the first Tuesday of each month.

Two state presidents addressed the Bowie-Miller Counties Medical Auxiliary, October 25th, at which time Mrs. William Hibbitts, of Texarkana, and Mrs. Alfred Hathcock, of Fayetteville, president of Texas and Arkansas Medical Auxiliaries, respectively, were honored guests at a lovely luncheon at Hotel Grim. Mrs. L. H. Lanier gave the invocation. Marigolds, chrysanthemums, and autumn leaves, interspersed with ferns, were used the length of the table.

Ill effects of over-organization were stressed by Mrs. Hibbitts in outlining the good that may be obtained by belonging to a few well-chosen clubs or societies. Disappointment in program, lack of purpose, change of tastes, and changes in friendships were listed as reasons for severing relationship with a number of clubs in which interest was waning. In closing she spoke of the splendid program of the Medical Auxiliary, telling of the scholarship fund now available for worthy students; the fund set aside for needy doctor's wives; the philanthropic expansion, self-education; and the social aspects.

Mrs. Hathcock spoke at length of her travels about Arkansas as president of the Auxiliary and gave several expansion programs that are being effectively carried on in other counties. She also outlined primary purposes of the organization, telling of its organization activities, the educational phase, the importance of public relations, the necessary study of legislation with reference to medicine; the growth of the student loan fund; library expansion; and the necessity of keeping informed about present-day medicine and the problems of the doctors. She praised the facts that the United States has the lowest death rate of any nation and attributed a part of this success to the aid of doctor's wives in keeping the public informed through public relations activities.

The speakers were introduced by Mrs. Joe Tyson, president of the local Auxiliary, who also introduced several

visitors, Mrs. Fount Richardson, of Fayetteville, secretary of Arkansas Medical Auxiliary, who accompanied Mrs. Hathcock; Mrs. C. E. Kitchens, of DeQueen, immediate past-president of the Arkansas Medical Auxiliary and present councilor; Mrs. Will Tyson, of New Boston; Mrs. R. M. Hubbard, of New Boston; Mrs. Leonard Hampson, of DeQueen; Mrs. Wm. V. Bessonette, of Texarkana; Mrs. Will Quinn, Mrs. Erman J. Adams, and Mrs. J. Q. Mahaffey, Jr., of Texarkana. Mrs. Tyson also paid tribute to other Texarkana women, who are serving on state boards: Mrs. Ralph Cross is third vice-president of Arkansas Auxiliary and Hygeia chairman, and also corresponding secretary for the Texas Auxiliary; Mrs. H. E. Murry who is publicity secretary for Arkansas, and Mrs. N. B. Daniel is chairman of the Tuberculosis Sanatoria Library Fund for the sixth district of Arkansas.

A brief report of the planned program for the visit of Dr. W. W. Bauer, of Chicago, on February 11th was given by Mrs. J. T. Robison. Dr. Bauer, editor of Hygeia magazine, will address the schools, the Rotary Club, and an open meeting of the Auxiliary on that date in Texarkana.

Preceding the talks, Mrs. Will Quinn sang, "I Dream of Jeannie With the Light Brown Hair" (Stephen Foster), and "Morning" (Oley Speaks), accompanied by Mrs. Erman Adams, and "God Bless America" was sung by the entire group.

The Washington County Medical Auxiliary met with Mrs. Fount Richardson for a work meeting October 18th. Mrs. Richardson presided at the meeting in the absence of the president.

Mrs. Alfred Hathcock presented the Bulletin of the American Medical Association Auxiliary and urged that as many members as possible subscribe. The members decided to sew for the WPA Nursery School, until their services are needed for the City Hospital again.

Mrs. J. S. Southard was hostess November 11th for the November luncheon meeting of the Auxiliary to the Sebastian County Medical Society. Present were Mrs. W. R. Brooksher, Jr., Mrs. M. E. Foster, Mrs. Minnie U. Fuller, Magazine; Mrs. D. W. Goldstein, Mrs. Fred Krock, Mrs. E. C. Moulton, Mrs. S. P. Stubbs, Mrs. B. L. Ware, Greenwood; Mrs. J. L. Kellum, Mrs. C. H. Finney, and Mrs. Mabel Scott.

MRS. W. F. ROSE, Publicity Chairman,
Auxiliary to the Sebastian County
Medical Society.

The Pulaski County Medical Auxiliary met at the home of Mrs. A. C. Shipp for the October meeting, with Mrs. W. C. Langston, Mrs. C. F. Shukers, and Mrs. J. P. Runyan, assistant hostesses. Mrs. S. C. Fulmer, president, presided over the meeting which was attended by 50, 13 of whom were new members. Mrs. W. L. Sadler was appointed Bulletin chairman. Several subscriptions were taken. It was voted to carry associate or honorary members on the membership roll according to the rules of the medical society. The student loan fund chairman, Mrs. Paul Fulmer, and committee, Mrs. B. A. Bennett, Mrs. K. W. Cosgrove, Mrs. C. E. Oates, Mrs. D. M. Switzer, and Mrs. J. C. Cunningham, had a cookie and candy sale at the open house of the medical school, making about \$14. The November meeting will be a dinner dance, Mrs. Estes Allen, entertainment chairman, reported. Mrs. L. F. Barrier and Mrs. M. E. McCaskill were appointed as courtesy committee.

BOOK REVIEWS

New and Nonofficial Remedies, 1940, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1940. Cloth. Price, postpaid, \$1.50. Pp. 656, LXVIII. Chicago: American Medical Association, 1940.

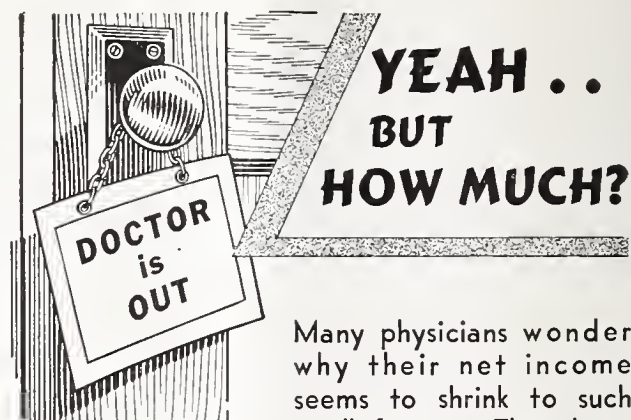
Each year a revised list of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association as of January 1st is published in book form under the title of "New and Nonofficial Remedies." The book contains the descriptions of acceptable proprietary substances and their preparations, proprietary mixtures if they have originality or other important qualities, important nonproprietary articles, simple pharmaceutical preparations, and other articles which require retention in the book.

A list of articles and brands accepted by the Council, but not described, is included in the book to cover simple preparations or mixtures of official articles (U.S.P. or N.F.) marketed under descriptive, nonproprietary names for which only established claims are made. Diagnostic reagents which are not used in or on the human body, and protein diagnostic preparations are not included in New and Nonofficial Remedies unless the determination of the status of these products by the Council has been requested by the distributor: If such products are found to be marketed in accordance with the Council's rules, they may be included in the list of undescribed, but acceptable articles.

New and Nonofficial Remedies is a practical and condensed text of pharmacology and therapeutics; it contains scientifically elaborated standards for all accepted nonofficial drugs; its Index to Distributors is a list of manufacturers, a large number of whose products have met the Council's high standards; its Bibliographical Index is a storehouse of references to reports which have been made mainly on unaccepted and unacceptable drugs; its prefatory material contains the Council's "Rules," a time-tested and reliable set of basic principles for the furtherance of scientific and rational medicine.

A supplement to the annual volume of New and Nonofficial Remedies is published twice a year to bring up to date such current revisions and additions as have been necessary since its last publication. Every product included in the book is subject to the official rules of the Council. The comments to rules are changed occasionally by way of clarifying interpretation to insure fair consideration of all submitted preparations as new standards are recognized. Such constant and critical consideration of its contents provides the physician with a valuable reference list of acceptable new preparations on which to base his selection for use in treatment according to the established current practices of the profession.

The 1940 New and Nonofficial Remedies, of course, contains the revisions which appeared in the supplements for the 1939 edition, and continues the plan of grouping together articles having similar composition or action under a general discussion. These discussions have undergone considerable revision in the 1940 edition. Further revision of statements regarding the actions, uses, dosage, composition, purity, identity, strength or physical properties of many of the articles has also been necessary in some cases. Noteworthy revisions are those of the chapter on Liver and Stomach Preparations, radically



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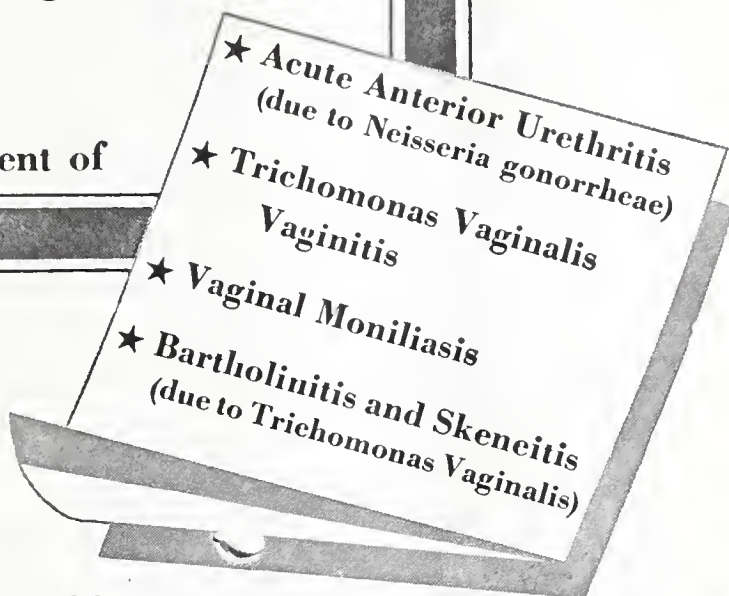
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rewritten and including a statement of requirements suggested by findings of the Anti-Anemia Preparations Advisory Board of the U. S. Pharmacopeia; the subsection Tuberculin, entirely rewritten to conform to newer knowledge in this field; and the chapter Allergenic Protein Preparations, the name of which has been changed to Allergenic Preparations. Minor but relatively important revisions are found in the articles: Bismuth Compounds, Serums and Vaccines, and Vitamins and Vitamin Preparations for Prophylactic and Therapeutic Use.

The indices of new volume of New and Nonofficial Remedies are of the same order and plan as in previous editions. A general index lists accepted articles, including those not described. This is followed by an index to distributors in which appear all the Council accepted articles listed under their respective manufacturers. Finally, a bibliographical index is added for listing proprietary and unofficial articles not included in N. N. R. This includes references to the Council publications concerning each such article as has appeared in The Journal of the A. M. A., Reports of the Council on Pharmacy and Chemistry, Propaganda for Reform, Vol. 1 and 2, or Reports of the A. M. A. Chemical Laboratory.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1939 With the Comments That Have Appeared in The Journal. Cloth. Price, \$1.00. Pp. 205, with five illustrations. Chicago: American Medical Association, 1940.

Only seven of the thirty-five reports listed in this annual collected report are of the familiar "Not Acceptable" or condemnatory type. Two reports announce omission of products from N. N. R., one being off the market. The remainder, far superior in bulk as well as in number, are concerned with educational and constructive considerations. This trend has been noticeable in recent years; it reflects the great predominance of the constructive over what may be called the destructive side of the Council's work of promoting rational therapeutics.

The educational reports touch three fields on which lie the front lines of present-day therapeutics progress—chemotherapeutics, endocrines and vitamins. Two reports of sulfapyridine deal with the status and Council acceptance of commercial brands. The report on Neoprontosil recognizes that term as the Winthrop Chemical Company's proprietary name for 4-sulfonamide benzene-2-azo-1-hydroxy-7-acetyl amino naphthalene-3:6-disodium sulfonate, and azosulfamide as the nonproprietary name for the same substance. The articles on Dilantin Sodium, Sobisminol Mass and Sobisminol Solution are status reports which accompanied the descriptions of accepted brands, a type of article increasingly used by the Council. Dilantin sodium is the new drug used in the treatment of epilepsy and has been accepted by the Council with carefully stated limitations for its use; sobisminol mass and sobisminol solution are new soluble bismuth preparations for use in the treatment of syphilis; they are noteworthy in that sobisminol mass has been shown to be effective when used orally. The reports on racephedrine and nikethamide deal with nomenclature; these terms are recognized as nonproprietary names for racemic ephedrine (the sulfate and hydrochloride are also recognized) and pyridine-8-carboxylic acid diethylamide respectively; the latter was introduced into medicine under the proprietary name Coramine-Ciba and

was the subject of a preliminary report by the Council in 1929 (The Journal, June 1, 1929, p. 1837).

The status report on questions concerning vitamins compiled by the Cooperative Committee on Vitamins of the Councils on Pharmacy and Chemistry and on Foods is becoming an almost annual event, awaited for the revisions of the "Allowable Claims" found acceptable for the various vitamins. This year's revisions are not extensive but the report is noteworthy for the re-emphasis of the Council's stand on the subject of vitamins and vitamin mixtures. Alas, the Councils' is but one clear, authoritative voice of rationality in today's whirlwind of polyvitamin and polyvitamin-mineral absurdities foisted on the gullible public by astute and sophisticated advertising technic. The preliminary and supplementary reports by Snell and by Snell and Butt on the new principle for active hemorrhagic diathesis known as "vitamin K" are timely and noteworthy.

The leadership of the Council in matters of endocrine therapeutics and nomenclature is well sustained by such reports as Chorionic Gonadotropin, Assay Standards for Chorionic Gonadotropin, Stilbestrol and the Present Status of Testosterone Propionate Three Brands, Perandren, Oreton and Neo-Hombreol Not Acceptable for N. N. R. No brand of any of these has been accepted and these reports are excellent justification of the Council's intelligent and well informed conservatism in this as in other matters.

Three "special" reports are worthy of mention. One is the warning report on the dosages of intra-urethral injection of solutions of local anesthetics, a reaffirmative strengthening of previous Council pronouncements. One is the Council statement Manganese in the Treatment of Dermatologic Disorders, which is buttressed by the conclusive and well documented paper of Dr. Maurice Sullivan, considered and sponsored by the Council. The third is the Study of the Promiscuous Use of the Barbiturates, Their Use in Suicides, a paper by Dr. W. E. Hambourger based on a review of medical literature and study of vital statistics. This study was authorized by the Board of Trustees of the A. M. A. and will be followed by other papers dealing with other aspects of the problem.

The present annual volume of Council reports is somewhat larger than usual and somewhat above the average issue in interest.

Obstetrics in General Practice: By J. P. Greenhill, B. S., M. D., F. A. C. S., Professor of Obstetrics and Gynecology, Loyola University Medical School, Chicago; Professor of Gynecology, Cook County Graduate School of Medicine; Attending Gynecologist, Cook County Hospital; Co-Editor of the Year Book of Obstetrics and Gynecology; Author of Office Gynecology. The Year Book Publishers, Inc.

Obstetrics in General Practice is written as a companion-piece to Office Gynecology. The book is abundantly illustrated with very practical drawings. There is an excellent discussion of ante-partum care which could well be copied for the pre-natal patients own use. The chapter on Ectopic pregnancy is exceptionally useful in problems of diagnosis. The newer concepts of the obstetric pelvis are given, using the general conformation of the inlet to divide the types into anthropoid, gynecoid, platypelloid and android types. Various descriptions of pathologies of labor and their treatment are given concisely. A good chapter on local infiltration anesthesia in obstetrics is included. There is also a brief discussion of obstetric endocrinology.

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TREATMENT OF FUNCTIONAL UTERINE BLEEDING *

FRED KROCK, M. D., F. A. C. S.

Fort Smith

The problem of the menstrual irregularities is one that frequently confronts the general practitioner. It is also one of considerable interest to the gynecologist, the endocrinologist, the internist, surgeon and radiologist as well. Before proceeding further upon this subject it is necessary to define what is meant by functional uterine bleeding. By this term we automatically exclude all forms of bleeding due to pregnancy or its complications, those due to tumors of the cervix or fundus of the uterus, and adnexae, the pelvic inflammatory conditions, as well as certain blood dyscrasias. In other words we only make this diagnosis after a careful exclusion of all organic causes for the abnormality.

We have then the problem of a vast departure from normal physiology which is not associated with gross or microscopic pathology, except for a hyperplasia of the endometrium in some cases which is probably secondary. What then is the cause of this condition? It may be said that the menorrhagia is merely the outward expression of a disturbance in the physiologic reciprocities between uterus and ovaries, caused by endocrine or non-endocrine causes, extrinsic or intrinsic factors. In order to clarify this statement we must briefly mention the normal physiology of menstruation. It is a well accepted fact that the anterior lobe of the pituitary manufactures a secretion which acts upon the ripening follicle to produce estrone which in turn initiates menstruation. It is also well known that the corpus luteum produces a secretion, "progestin," which exerts an inhibiting influence upon the menstrual flow. We may compare the former to the accelerator of an automobile, and the latter to the brake pedal. We know that if the brakes of our

car are worn we have difficulty in stopping when we wish. If on the other hand the engine is not in good condition, we get little or no response when we step on the accelerator.

The factors involved in this alteration of normal physiology may be numerous. For instance there may be clinical evidence of dysfunction of the pituitary or thyroid glands. In other cases a familial history may be elicited. Again nutritional and gynecologic causes have been invoked. In the final analysis we must admit that we do not know just exactly what underlying factors operate to produce this irregularity. A voluminous literature on this subject offers much pseudo-scientific speculation, and unfortunately much of our modern therapy is based upon such speculation.

Treatment of this condition is often unsatisfactory and probably all of us can cite instances from our own experience similar to the one described by Priest in a recent article of a case of functional uterine bleeding in a young girl observed between the ages of thirteen and eighteen. During this time he supervised the diet, exercise, and rest without results. Various oxytocics, such as pituitrin and ergotrate, failed to control the bleeding. Anterior pituitary-like hormone therapy was instituted without affecting the abnormal bleeding. Estrogenic substances followed by corpus luteum extracts were of no avail. X-ray therapy of the spleen and pituitary was tried without result. Repeated blood transfusions, on one occasion using as a donor a pregnant woman, produced only temporary improvement. Three curettages were done in three and one-half years. Thyroid extract had no effect. The patient finally went away on a vacation and had no further trouble. It is these spontaneous remissions, which are so common in cases of functional bleeding that are responsible for the extravagant claims which have followed the institution of any new form of treatment.

While it is true that the cases we have seen have belonged to the more severe types, and

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

have been referred because of their intractability to simple forms of treatment, we must admit that we have never seen a case respond to the use of various pituitary extracts, extracts from the urine of pregnant animals, or corpus luteum products. These various products have recently come out in much stronger potencies, and our experience with the larger doses has not been carried out sufficiently long to demonstrate their effectiveness. One of the more recent newcomers to the field of endocrinology has been the use of testosterone propionate, or synthetic male sex hormone, for the treatment of functional uterine bleeding on the basis of animal experiments in which repeated injections of this substance apparently inhibited the growth of Graaffian follicles in the albino rat. Many successful case reports are appearing in the literature, but again we must remember that spontaneous remissions are one of the commonest symptoms of this condition and any therapy is likely to succeed occasionally. In view of similar claims advanced not so long ago for the use of estrogenic substances in cases of hemophilia in the male with its eventual discard as absolutely worthless in this condition, it is our prediction that the use of male sex hormone for the treatment of functional uterine bleeding will suffer a similar fate. More recently substitution therapy has been given an impetus by the use of pellets of pure synthetic ovarian hormones implanted subcutaneously.

Within the past year another point of attack has been offered in the treatment of functional uterine bleeding. It was found that patients put upon liver extract for the secondary anemia incident to the bleeding oftentimes had a cessation of bleeding. Further research work demonstrated the presence in liver extract of an anti-bleeding factor. This factor has been prepared in a pure form and is marketed in the form of capsules. Twenty-four capsules are given the first twenty-four hours and followed by three capsules four times daily until one hundred have been taken.

Case Reports

Miss L. D., age fourteen years. Onset of menstruation three days previously. Flow became so profuse that patient became irrational. Blood was flowing from the vagina in a continuous stream. Hemoglobin was twenty-five per cent with 1,525,000 red cells. Pelvic organs were essentially normal on rectal examination. A transfusion of five hundred cubic centimeters of citrated blood was given followed by ergotrate, one ampule every four hours. Pituitrin, one cubic centimeter, was given every four hours. Ten cubic centimeters of calcium gluconate were given intravenously. There was no decrease in bleeding. At 9:00 p. m. patient was given six capsules of antimenorrhagic factor which was repeated every four hours. At 9:00 on the following morning bleeding had slowed up

markedly and ceased entirely after 3:00 p. m. Patient has menstruated normally since at regular intervals. The results from this therapy are often spectacular.

Miss A. P., age sixteen years. Onset of menses at fifteen with thirty-day regular cycle and duration of four to five days. Six months previously patient began to bleed profusely and continuously following menstruation. Various remedies were tried and three months later a dilatation and curettage was done. The period in the following month lasted two weeks. The next period resulted in intermittent bleeding for six weeks with profuse flow and passage of clots at times. Pelvic examination revealed no gross abnormalities. Antimenorrhagic factor capsules were started. The bleeding stopped six days later. The following four menstrual periods were normal with a duration of four to five days and moderate flow. The fifth period was accompanied by a profuse flow which lasted eight days and the antimenorrhagic factor capsules were again administered with cessation of bleeding.

Still another approach to the problem is being offered at present in the experimental stage in the form of a synthetic ovarian-like substance named stilboestrol. This substance is prepared from soy beans and can be given orally or hypodermically. It is not commercially available as yet. In a recent article Karnaky makes the statement that stilboestrol will cure a case of functional uterine bleeding in less time than it takes to send the patient to a hospital for dilation and curettage. It unfortunately has a cumulative toxic side effect on approximately twenty per cent of the patients in the form of severe nausea, vomiting and diarrhea.

Case Report.

Mrs. M. S., age thirty-two; colored, nullipara. Seen September 16, 1939, with a history of profuse vaginal bleeding for two months continuously. Pelvic examination was negative for organic disease. Eleven days later the hemorrhage recurred with extreme severity. The hemoglobin at this time was fifty-four per cent with 2,640,000 erythrocytes. She was given twenty-four capsules of antimenorrhagic factor. Bleeding stopped within five hours. The following month the bleeding recurred. She was given stilboestrol in a dosage of five milligrams the first twenty-four hours and instructions to continue four milligrams per week. On this regime the following four menstrual periods were normal, lasting four days. The medication was stopped at our request. Three weeks later she began to bleed again profusely for one week. Stilboestrol was resumed with resumption of a normal cycle.

Unfortunately these conservative methods often fail and we are faced with the necessity of producing a temporary or permanent amenorrhea by radiation or surgery. While the use of these methods is construed by some as an admission of failure of specific endocrine therapy, only too often does it become necessary for the preservation of the health of the patient.

It is our feeling that in all cases at or near the menopause with functional bleeding, a permanent amenorrhea should be produced either by hys-

terectomy or irradiation because they represent primarily an ovarian failure from which not much future improvement can be expected. Ordinarily this is the one ideal indication for radium and, in our opinion, is the procedure of choice, except in those cases in which operative repair of injuries incident to childbirth is also indicated. X-ray therapy is just as effective but produces somewhat more discomfort. Since we must in all these cases do a diagnostic curettage to rule out malignancy, it is a simple matter to insert a capsule of radium at the conclusion of the operation. We have ordinarily used (in this group of cases) 2,000 milligram hours of radium with a one millimeter brass capsule placed within the cavity of the uterus.

Case Report

Mrs. C. E., age forty-seven; multipara. For the past two years the menstrual periods have been irregular coming at intervals of three to eight weeks with scanty flow. The patient had been receiving weekly injections of (10,000 units in oil) of estrogenic substance for menopausal symptoms. For the past four weeks has been bleeding continuously and profusely. Anterior pituitary-like hormone was given subcutaneously in large doses without affecting the bleeding. Pelvic examination under anaesthesia showed no gross changes. Curettings showed a senile type of endometrium. 1,000 milligram hours of radium was applied and repeated four weeks later. There has been no bleeding since in the past year.

In the group of patients between the ages of twenty and forty a decision as to the proper treatment to be used is exceedingly difficult. One should ordinarily try the various conservative measures, and frequently in this group a spontaneous remission occurs. Dilatation and curettage usually result in a temporary remission of three to four months. If these measures fail, then it is our procedure to use a small dose of radium not to exceed 1,000 milligram hours. This suffices to bring about a temporary amenorrhea and upon resumption of menstruation, a normal flow usually follows. If the condition cannot be controlled by this dosage, then hysterectomy is indicated, since by this method, ovarian function can be retained and the patient spared the symptoms incident to a premature and artificial menopause which is not true with doses of radium above 1,500 milligram hours.

Case Reports

Mrs. R. W., age thirty-seven years; multipara. The patient has been bleeding continuously for the past four weeks without pain. The last few periods have been two and one-half months apart. Before the onset of the present illness she had not menstruated for seven weeks. The red cells had decreased to 3,650,000. Pelvic examination revealed no gross changes. A small amount of endometrium was removed which microscopically showed the changes characteristic of hyperplasia of the endo-

metrium. 600 milligram hours of radium was given. One year later patient began to menstruate normally at three-month intervals. Pregnancy occurred and she was delivered of a normal full term child five months ago.

Miss L. M., twenty-nine-year-old white nullipara came in February 1, 1939, after bleeding continuously without pain for three weeks. Pelvic examination revealed no gross changes. She was given stilboestrol in a dosage of 2 milligrams a day. Three days after starting medication the patient began to vomit everything taken. The medication was stopped immediately but the vomiting continued for three days and the patient had to be hospitalized for its control. There was little effect on the bleeding. A dilatation and curettage was now done and 500 milligram hours of radium applied intrauterine. There has been no further bleeding, and menses have not been resumed. The endometrium showed a typical hyperplasia.

Miss O. C., thirty-three-year-old white nullipara, first seen in February, 1938, because of a profuse vaginal bleeding of three weeks without pain. Pelvic examination showed no organic cause for the disturbance. She was given two cubic centimeters of anterior pituitary-like hormone intramuscularly daily for ten days without changing the course of the bleeding. On March 1, 1938, a diagnostic curettage was done and 900 milligram hours of radium given. Microscopic examination showed a mild hyperplasia of the endometrium. Patient did not menstruate further until November, 1939, and had been complaining of hot flashes. Stilboestrol was given in two milligram doses twice weekly which suppressed this vasomotor phenomenon admirably. Since this time she has been menstruating normally every month without discomfort.

The management of the adolescent group of cases with functional bleeding is particularly trying. Here again various conservative measures should be used. Ordinarily if one normal cycle can be obtained the patient has no further trouble. We hesitate in using anterior pituitary-like hormone on the basis that it may produce premature ripening of large numbers of Graaffian follicles with subsequent sterilization of the patient. Dilatation and curettage sometimes effects a remission. When all these measures fail, we do not hesitate to follow curettage with radium. It is important that the dose does not exceed 600 milligram hours. It is preferable to use 300 milligram hours, and following the temporary amenorrhea, a normal cycle is the rule. The dangers of irradiation in young girls have been greatly over-estimated as recently pointed out by Kaplan, and, provided that small doses are used, radiation is certainly preferable to hysterectomy or years of invalidism due to the severe anemia incident to intractable bleeding.

SUMMARY

1. The problem of functional uterine bleeding is still one of major importance in the practice of general practitioners, radiologists and surgeons.

2. The results obtained from the specific endocrine therapy available at present are disappointing in the majority of the severer types of cases.
3. Radiation is the procedure of choice in the treatment of all patients at or near the menopause except those in whom operative repair of injuries incident to childbirth is also indicated.
4. After conservative measures fail, supravaginal hysterectomy results in less discomfort to the patient between the ages of twenty and forty than doses of radium above 1,000 milligram hours.
5. In the abnormal bleeding of the adolescent, radiation should not exceed 600 milligram hours and one should not hesitate to employ it because of a theoretical aversion to the use of radiation in young girls.

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DO YOU KNOW

The phrase "socialized medicine" is a grand phrase and it conjures up a beautiful picture of health and service; where the community pays everybody's health bills and the doctor's service, among others, will cost nothing. But like many idealistic pictures systems of compulsory sickness insurance do not work. Wherever tried, sickness and death rates are higher than in those countries where sickness service continues as a decentralized enterprise.

LIVER FUNCTION IN SURGICAL DISEASES *

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The anatomical structure of the liver is quite simple, but physiologically this organ is most complex. Liver cells are able to metabolize, store, secrete, detoxify and excrete. Since this one type of cell takes part in so many functions, a failure of any one may well be followed by failure of others. A loss or deficiency of any function must then be taken seriously. The efficiency of an organ depends largely on its reserve and tests for function are really tests for reserve, or the ability of the organ to work under pressure.

The Quick hippuric acid test depends on the efficiency of the liver to perform two functions, namely, the ability to produce glycine and second, the synthesis of hippuric acid brought about by the conjugation of glycine with benzoic acid. This is a test of the detoxifying power of the liver. There is no store of glycine in the body, the liver having a maximum hourly synthesis. When benzoic acid is ingested, it is combined with glycine and almost completely eliminated in the urine as hippuric acid. Regardless of the amount of benzoic acid taken in, the output of hippuric acid remains relatively constant. Quick was the first to apply this synthesis for the detection of liver damage.

Briefly the technique of the test is as follows: Six grams of sodium benzoate dissolved in water is administered orally and hourly specimens of urine are collected for four hours. Each specimen is acidified with concentrated hydrochloric acid and stirred until precipitation of hippuric acid is complete. The precipitate is filtered, dried and weighed. The total output in four hours of benzoic acid as hippuric acid is from 3 to 3.5 grams in the normal adult. The result is converted to terms of benzoic acid by multiplying by the factor 0.68. The simplicity of this test makes it available to most laboratories. Its accuracy and value as a test for liver function have been confirmed by many. This dose of sodium benzoate may be distasteful and occasionally causes vomiting. Probststein and Londe have recently modified Quick's technique by giving four grams instead of six and collecting a single urine specimen at the end of two hours. From a large number of tests they conclude that a dose of four grams is fully capable of gauging the maximum rate of synthesis, and at the same time causes less gastric discomfort.

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

The peak of excretion is reached in two hours, 50 to 77% being eliminated in that time, hence a single determination of hippuric acid in a two-hour specimen is all that is necessary, with 50% excretion being regarded as the lower limit of normal. The test is valuable in demonstrating hepatic damage before clinical signs are evident.

The frequency of liver involvement in biliary disease is generally accepted today. Recently Graham and others have pointed out that patients with damaged livers are poor risks for any type of surgery. Boyce emphasizes that pre-operative study of the state of the liver is equally as important as that of the heart, lungs and kidneys. In our own cases we are convinced that a knowledge of liver function before operation is of extreme importance. Liver death as first described by Heyd in 1924 is most dramatic. In these cases death occurs in 24 to 48 hours after operation. It is characterized by extremely high fever coming on too soon to be caused by infection. In a second group death occurs in seven to fourteen days after operation with all the symptoms of uremia dominating. At autopsy the significant finding is degeneration and necrosis in the liver. In addition to the pathology in the liver, the second group shows similar changes in the kidneys. Boyce states that these findings have been too constant and consistent to doubt that the hepato-renal syndrome is a definite entity. Helwig and Orr reported cases of severe liver trauma in which post-mortem studies revealed a similar relationship between damaged liver and the kidneys. The essential difference between the immediate and deferred type of liver death is that the patients who die promptly with hyperpyrexia and liver degeneration, do not live long enough to develop degeneration of the kidneys and uremia.

From both experimental and clinical evidence we may conclude there is a hepato-renal relationship when the liver is damaged either by disease or injury, but the exact mechanism or causative factors are as yet unknown. Although the term liver death was first applied to cases following operation on the biliary tract, a similar type of hyperpyrexial death is now recognized following surgery outside the biliary system. The liver undergoes pathologic changes in hyperthyroidism, a relationship existing between the severity of toxicity and the degree of liver damage. Thyroid crisis is characterized by a sudden and rapid rise in temperature and pulse on the first post-operative day, coma developing with extreme degrees of fever. The similarity between this condition and liver failure from

other causes is striking. Haynes, Mageth and Powers of the Mayo Clinic report results of the Quick test in a series of patients with hyperthyroidism. They were able to demonstrate the tendency toward a lowered hippuric acid output as the basal metabolic rate rises. They obtained the same results using the bromsulfalein dye test.

Lowered liver function following any type of surgery may be demonstrated by both the hippuric acid and dye tests. The post-operative drop in function is significant of the need for adequate pre-operative preparation. If damaged, the liver should be given the necessary time to build up its reserve before subjecting it to the strain of the operation and anesthetic.

We believe those cases with an impaired liver function before operation, and especially the cases which do not improve with pre-operative treatment, will have a stormy if not fatal post-operative course. Cases of liver death are especially disconcerting. One begins frequently with a patient who shows no signs of jaundice and apparently is in good condition. The operation proceeds smoothly, then immediately comes on the progressive rise of temperature. In some cases the symptoms are mild and under the influence of large amounts of fluids containing sugar, the picture rights itself and the patient recovers.

Wilensky has reviewed the different conditions in which hepato-renal symptoms and post-mortem lesions occur. The association of hepatic and renal pathology is frequent, because these two organs are the chief means of excretion after metabolic change has taken place. Such symptoms and lesions are found after anesthesia, severe liver trauma, drug poisoning, toxemias of pregnancy, thyrotoxicosis, burns and intestinal obstruction. Clinical signs of liver failure are, high fever, unduly prolonged post-operative vomiting, tendency to hemorrhage, jaundice, diminution in secretion of urine, retention of nitrogen in the blood, and signs of cerebral disturbance.

Although investigators have long attempted to find a test which would indicate the condition of the liver, it is generally accepted that no single laboratory test is sufficient. There are some disadvantages for each type of test. White, Deutsch and Maddock state that the hippuric acid test is not reliable in the face of marked dehydration and renal impairment; however in a comparative study of 300 cases of jaundice, they found this test to be more sensitive than

any other in all types of liver disease. The majority of deaths in this series had an excretion of less than 1 gram hippuric acid in four hours.

Of the tests for liver function the hippuric acid and the bromsulfalein tests seem to be the most valuable at this time. Mann has shown that if only 20% of the liver be intact, it can function adequately with regard to carbohydrate metabolism, hence the glucose tolerance test is not conclusive as to the extent of liver damage.

Because of the constant change in liver function during an attack of jaundice, the need for repeated or serial tests should be emphasized. While these tests do not make a diagnosis, the information obtained will be most helpful in deciding prognosis, urgent need for protective treatment of the liver, and surgical risk.

HONOR ROLL

The following county medical societies have remitted the annual membership assessment of all their members for 1941:

Hempstead
Johnson
Searcy

The following county medical societies have made a partial report:

Bradley
Cleburne
Craighead-Poinsett
Lawrence
Mississippi
Nevada
Ouachita
Sevier

THE PRESIDENT SPEAKS ON MEDICAL SOCIALIZATION

"Neither the American people nor their government intends to socialize medical practice any more than they plan to socialize industry." —President Roosevelt, as quoted in the New York Times, November 1, 1940.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith, and A. S. Buchanan.

Arkansas began her territorial existence in 1819. She had been a part of the Spanish Provinces of Louisiana. Then she belonged to France and Napoleon needed money. Mr. Jefferson had it, and with it a strain of Yankee shrewdness so he made the trade in 1803. The Tricolor came down the flag staff in front of the Cabildo in New Orleans and the Stars and Stripes were hoisted and Arkansas became a part of the United States.

The Capital was moved from Arkansas Post to Little Rock, which was first named Arkopolis, a name which fortunately did not endure. The spirit of adventure was in the air, and up the Arkansas River on steamboats, down the trail from St. Louis to Texas, came those who were to lay broadly and deeply the foundations of this commonwealth. Among them was Dr. Matthew Cunningham, the first doctor to locate in Little Rock. His picture hangs in the City Hall for he was the first Mayor of Little Rock. It is that of a cultured gentleman such as we know him to have been, a graduate of the University of Pennsylvania School of Medicine, Class 1807. His diploma, yellow with age, is in the library of the University of Arkansas School of Medicine, signed by Dr. Benjamin Rush, who signed the Declaration of Independence and was the most prominent physician of his day; William Shippen, Surgeon General of the Revolutionary Army; Casper Wistar; Philip Syng Physick, who operated upon Chief Justice John Marshall. These names we pronounce with love and reverence. Dr. Cunningham served as a surgeon in the Navy in the War of 1812. After the war he studied medicine in Paris and in England, so one can be sure that he brought with him a training in medi-

EDITORIAL NOTE: This is the first installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

cine second to none of his contemporaries. Mrs. Cunningham was a Bertrand. Her transit from a sheltered life where all was comfort and refinement to a log cabin in the deep woods must have been a trial. Dr. Cunningham and his wife rest side by side in Mount Holly Cemetery in Little Rock.

Local History has it that Dr. Busnine, an Englishman, a member of the Royal College of Surgeons of London, and the Faculty of Medicine in Paris and of late a surgeon of the East India Company, located in Arkadelphia. Dr. Alden Sprague later located in Little Rock. His coming was heralded by the press in a very gracious manner and his professional life justified all that was said concerning him. He became a very active and prominent member of Masonry.

Dr. W. G. Von Poelinitz, a graduate of the University of Goettingen, also arrived at the Anthony House, then and for years the leading hotel in Little Rock. He practiced here for only a short time and then vanished, probably a lure of greater prospects elsewhere.

June 1, 1830, there appeared in the Arkansas Gazette the statement that Drs. Watkins and Fulton had opened a drug store where might be purchased fine drugs, also a complete line of patent medicines all fresh and recently purchased in New York City. Doctors then as now, frequently carried on a drug store while doing an extensive practice.

Dr. A. G. Brent, a graduate of the University of Glasgow, Scotland, located in Randolph county. His notice also stated that he had attended the University of Dublin, Ireland. We find no record of the subsequent activities of Dr. Brent in Randolph county. Perhaps no news is good news and that he served his community faithfully and well.

The first recorded attempt to regulate the practice of medicine in Arkansas occurred in 1832 while it was still a territory. The Legislature enacted a measure for this purpose which was vetoed by Governor John Pope. The act provided for a board of eight physicians to be appointed by the Governor whose duty would be to examine and license all persons practicing medicine in Arkansas Territory. The reasons given in the veto are as follows: "At this time this law is premature and impolitic, unwise and against the spirit of freedom. Wiser and more congenial for the citizens, with the spirit of freedom to tolerate quack doctors, while the learned and qualified of the profession, are at

liberty to combat them." So we see that liberty was in danger in those days as it often is now, but had its guardians.

We bring to your attention an interesting phase of professional activities which lighten and cheer the more laborious side of practice. Doctors in our early days were almost without exception college men, and were able to express themselves on occasions, which they did, and did it well. I have searched old records of a century past and have been rewarded. Let me share with my readers the results.

At a dinner given Col. A. H. Sevier, Territorial Delegate to Congress, November 6, 1833, the toasts were as follows: First on the program, was Dr. McWilliams: "General Andrew Jackson like the immortal Washington, ever leaning on the Union of the States as the staff of our political safety." Next on the program was Dr. William P. Reyburn: "William S. Fulton, the accomplished gentleman and scholar; in the discharge of his official duties as Secretary of our Territory, he has given universal satisfaction. Let honor be paid where honor is due." Then spoke Dr. J. C. Roberts: "Col. A. H. Sevier, the favorite of the people. Conway county will desert him if he notices every feist that barks at his heels." Dr. J. C. Elliott ended the program by stating: "Lt. R. D. C. Collins, U. S. A.; His gentlemanly deportment and assiduity in the discharge of his duties, reflect honor on his official station."

On this great occasion only doctors supplied the eloquence. No lawyers appeared. It is only fair to assume that those in charge of the banquet knew what was best. We are apt to regard the stately periods of these toasts and the orations that followed as exuberant, and perhaps they were, but they were a part of the times and an aftermath of the glowing period that was to warm the great heart of the American people to achieve independence and to make a Constitution and a Government that would endure.

Again we learn of a festive occasion on October 26, 1833, a dinner given in honor of Governor Pope, who so heroically vetoed the law regulating the practice of medicine, which however did not seem to have affected his standing in the hearts of his countrymen, or the hearts of the medical profession. The first toast was given by Dr. W. P. Reyburn. Dr. Reyburn had toasted Secretary Fulton on another occasion. This time his toast was: "A. H. Sevier. Our delegate to Congress, true to his trust as a public servant,

true to the people as their representative and true to his friends." Then comes another statement, "when faithless to either, off with his head." Dr. Elliott's toast was as follows: "The result of the last congressional election has proved that the citizens of Arkansas are not ungrateful for past services." At this time there entered one of those singular aberrations shared by the public. Dr. John B. Dickson responded with the following toast: "John C. Calhoun and Aaron Burr. A pair of noble brothers." No doubt Dr. Dickson later could have revised his eloquence about the latter gentleman in the light of recent historical discoveries, but at that time Burr was still strong in the hearts of many people. There comes a toast now by Dr. C. H. Alexander. Because of his Scotch origin we would prefer to believe that Dr. Alexander himself prepared the wording of his toast, which is as follows: "To the powers that be. Let no faction prevail against those whose sole object is the loaves and fishes of the public treasury." Scotland forever.

On July 4, 1833, conviviality took possession of Lewisburg in celebration of the fifty-seventh anniversary of the Declaration of Independence. Again the medical profession elbowed the lawyers out of the way. The toasts were as follows: Dr. John S. Ball: "May the daughters of America wear their charms as attendants on their virtue, the satellites of their innocence and the ornaments of their sex." The next toast was that of Dr. J. C. Roberts: "Martin Van Buren, recalled from foreign services by the aristocracy of the Senate of the country and promoted to the second office on earth by the voice of millions of free men. When the national tree of our country is worn out by the old age and exhaustion of Old Hickory, may Martin Van Buren be grafted on its roots."

In 1845 the first medical book to be published was written and published by Dr. Solon Borland. It was written on the subject of milk sickness, a disease that cost the life of the mother of Abraham Lincoln. It was very prevalent in many communities along the Mississippi. It would be very interesting to obtain a copy of this publication, but the writer has never seen one.

A most interesting book was written by Dr. A. W. Webb, of Lake Village, Arkansas, and written in long hand, embracing the treatment of practically all the diseases that he had met in his practice near Lake Chicot. This book was bound in law calf and was never published. It is treasured in the library of the University of

Arkansas School of Medicine. Dr. Webb afterwards moved to Little Rock and was mysteriously murdered at night along with his son at their residence, I think, on Third and Scott streets. This book of Dr. Webb's was written in a fine hand, resembling steel engraving. Besides this contribution to medical knowledge, nothing is known of Dr. Webb's activities as a practitioner.

In the lecture room of the University of Arkansas School of Medicine is a very large painting of Dr. Craven Peyton, surgeon of Yell's regiment in the Mexican War. Col. Yell was killed in the Battle of Buena Vista. After Dr. Peyton's services with the regiment, he located in Little Rock and for many years was one of its leading physicians. He married a Miss Peay, from which union there were no descendants. Dr. Peyton's portrait, a large oil painting, heavily framed, is one of the familiar sights to the students in the Medical School. It is the portrait of a very high type of physician and gentleman.

The Fifties and the War between the States brought to our notice a number of interesting characters who exercised their influence on medicine in a marked degree. In addition to Dr. Craven Peyton, who served as a surgeon in the War between the States, there were to be remembered Dr. James A. Dibrell, of Van Buren, the ancestor of a series of physicians who have enriched and impressed for all time the practice of medicine in this State. Dr. Dibrell was of Huguenot extraction, his ancestry having come from France to live at Manakin Town on the James River above Richmond.

He was the father of Dr. J. A. Dibrell, for 19 years dean of the School of Medicine; Dr. Edwin Dibrell, professor of physiology and later of the practice of medicine; Dr. Mat S. Dibrell, of Van Buren, a graduate of our School of Medicine in Little Rock; and also the grandfather of Dr. John R. Dibrell and Dr. J. L. Dibrell, now practicing in Little Rock.

Dr. J. A. Dibrell, Sr., of Van Buren, served as a surgeon in the Confederate Army, having charge of the wounded after the Battle of Prairie Grove. He was an accomplished and successful surgeon, a classical scholar, reading Latin at sight. He was educated at Nashville, Tenn., which turned out the best type of Latin scholars.

Dr. Duvall, of Fort Smith, was another of the distinguished Confederate surgeons. He married a daughter of Dr. J. A. Dibrell.

Dr. W. B. Welch, of Fayetteville, was a Confederate surgeon, accomplished physician, an

eloquent speaker and a physician much beloved in his community.

Perhaps the most colorful figure that grew out of the War was Dr. J. M. Keller, of Hot Springs. Dr. Keller was the Chief Surgeon of the Trans-Mississippi Department and was a typical gentleman of the old school, quick to resent and affront, chivalric in his relations with everyone. Tall, of distinguished appearance, he was an engaging personality.

After the War between the States, General Nathan Bedford Forrest became engaged in a personal altercation with General Custer, who was afterwards killed by the Sioux Indians. It looked for a time as though there would be a duel and the suggestion was made that it be fought on horseback with cavalry sabres, to which General Custer and General Forrest both agreed. Dr. Keller offered his services as a second for General Forrest and was very active in arranging the preliminary details. However, the matter was smoothed over by mutual friends and the duel never transpired.

Dr. Keller was a descendant of General Spotswood, Colonial Governor of Virginia, and I have always believed that he must have resembled in many particulars his remote ancestor, not only in personality but in physical appearance. He was certainly a gentleman of the old school.

The City of Helena then as now was rich in eminent men. General Patrick R. Cleburne was then a resident of Helena. It is said that altogether Helena furnished seven generals to the Confederacy. Among the surgeons who served from Helena were Horner, Burke and Linthicum. It was a freemasonry among the men who had worn the gray. My early recollection of the meeting of the Arkansas Medical Society contains numerous incidents where these distinguished men used that occasion to revive memories of war service and to renew affectionate friendships that lasted throughout life.

The writer recalls on one occasion when the Medical Society met at Fort Smith, he was present with Dr. Horner at a reception. Punch was being served, and presiding at the punch bowl was a sweet young lady of some sixteen years. When Dr. Horner's name was mentioned, she looked up with an eager smile and asked, "Are you Dr. Horner?" He replied, "Yes, I am." The young lady then said, "Dr. Horner, my grandmother told me to be sure and meet you as you were her first sweetheart." Dr. Horner bowed with all the graciousness the occasion allowed and said, "My dear young lady, I

have often heard my grandfather speak of your grandmother."

Among those who achieved distinction in various portions of the State were particularly Dr. Jett, of Hempstead county; Dr. Church, of Ouachita county; Dr. Folsom, of Lonoke; Dr. H. C. Dunavant, of Osceola, who served with General Forrest as a rough rider in his celebrated command. There are others deserving of mention, of whom time does not permit us to speak in detail.

In the office of the School of Medicine of the University of Arkansas there hangs the first diploma ever issued by that institution. It was awarded in 1880 to Dr. Thomas Pinson, who was the first graduate of our School of Medicine and who still lives in Kerrville, Texas. The diploma is signed by General Dr. H. Hill, then President of the University and one of the most distinguished generals of the Confederacy; also by Governor Miller, at that time Governor of Arkansas; and the following: Dr. P. O. Hooper, Dr. Edwin Bentley, Dr. J. J. McAlmont, Dr. J. A. Dibrell, Jr., Dr. A. L. Breysacher, Dr. James H. Southall, Dr. R. G. Jennings, and Dr. Claibourne Watkins.

These names are to be remembered. They were the founders of the School of Medicine of the University of Arkansas. Later in a year or two were added the names of Dr. T. E. Murrell, Dr. James H. Lenow, and Dr. L. R. Stark. The original number, however, were those who actually founded the school, it being a joint stock company. Its connection with the University was a merely nominal one and consisted of the diploma being signed by the President of the University and the Governor of the State along with the Dean of the faculty and the remaining members. The Governor appointed a board of three to assist in the management of the School of Medicine. This board, however, functioned in name only.

The school was established in a three-story building on West Second Street. Lectures began in the fall of 1879, and there was one graduate the following spring. In 1891 a brick building was erected on the northeast corner of Second and Sherman streets, which for that time compared very favorably with schools in other locations.

A few years later Dr. Isaac Folsom, of Lonoke, endowed the school with \$20,000, setting aside that amount in his will to establish a clinic for charity cases to aid clinical teaching. The name of Isaac Folsom has been perpetuated in this

way upon our diplomas and as the name of our free clinic.

Dr. P. O. Hooper, in addition to being a professor of theory and practice of medicine, served as dean of the School of Medicine for 7 years. Dr. Hooper was an interesting personality. In physical appearance he was tall and rather portly. He bore a remarkable resemblance to pictures of Benjamin Franklin, and his appearance would attract attention wherever he went. There was always about him an air of distinction and force. His later years were spent as superintendent of the State Hospital for Nervous Diseases. He was a distinguished surgeon in the armies of the Confederacy.

Another distinguished surgeon was Dr. Edwin Bentley, who occupied the chair of surgery from the foundation of the school until his death, at which time he was also dean of the School of Medicine. The present building of the School of Medicine was erected upon the site of his old home, which was torn down to make way for the new building.

Dr. Bentley was born in Connecticut, July 3, 1824. He was educated in the public schools and was graduated from Dartmouth School of Medicine and afterwards from the College of Physicians and Surgeons, New York City.

Dr. Bentley's army career was most interesting. He was appointed assistant surgeon, Fourth Connecticut Volunteer Infantry, July 6, 1861. In October, 1861, he was made brigade surgeon, Third Brigade, First Division, Fifth Corps. Later he was in charge of the General Hospital, Alexandria, Virginia. During the Battle of Gettysburg he was detached and ordered to Gettysburg for extra duty. He served continuously for two days and nights, constantly at work caring for the wounded. After the close of the War between the States he entered the regular army and served continuously until his retirement at the age of sixty-four. He was in the Modock War in California, where he helped to found the Cooper Medical College in San Francisco, and served at various places. Finally he was retired from service in Little Rock.

In addition to his surgical ability Dr. Bentley was a connoisseur of books. His treasures have enriched the library of the School of Medicine. One of his gifts was a book on surgery published in 1544 written by Video Vidius, a Florentine surgeon, and illustrated by the school of artists of Florence. This book is one of two in the United States, the other being in possession of the Sur-

geon General's office. In addition are the books on anatomy by Cheselden, of London, and Bell, of Edinburgh, along with a number of other interesting works that are now in our library. Among these one finds a series of notes made while a student at the College of Physicians and Surgeons in New York City. Pasted into these notebooks are sections of the smaller intestine, showing ulcerations of the Peyer's patches. These specimens are still in a good state of preservation and are probably the only ones preserved in a similar manner that exist, after one hundred years of preservation.

Dr. J. J. McAlmont was professor of materia medica and served in that capacity until his death. He was deeply religious, earnest and faithful member of the profession, a man much respected and loved by all who knew him. Dr. McAlmont and his wife occupied a residence at the corner of Eighth and Cumberland streets, Little Rock, which is still preserved and has been used as a private school. He was the grandfather of Dr. Milton Vaughan, who served in the Spanish-American War as a surgeon and for many years afterwards in the army.

Dr. James A. Dibrell, Jr., who succeeded Dr. Hooper as dean of the School of Medicine and who served in that capacity for twenty years, was a great moving influence in the school. He was professor of anatomy and was very active in surgical work. Dr. Dibrell was one of the most beloved physicians who ever practiced in Little Rock. From his Huguenot ancestry he inherited all of the great qualities that characterized that wonderful people. He was, like his father, a graduate of the University of Pennsylvania. He was too young to be of service in the War between the States, but his works of that great struggle were always fresh in his memory.

Each year Dr. Dibrell was accustomed to leaving Little Rock for the Maumelles with a hunting party, which remained a week. It seemed that nothing would prevent this annual pilgrimage, the chief actors of which were life-long friends of Dr. Dibrell.

The history of the practice of medicine from 1870 to the early part of the twentieth century could not have been written without in great part describing the influence of Dr. J. A. Dibrell.

Dr. A. L. Breysacher, another ex-Confederate surgeon, who came from St. Louis to Little Rock, was professor of obstetrics in the School of Medicine until his death. Dr. Breysacher was for many years the partner and associate of Dr. P. O. Hooper. Always spotless in Prince Albert coat,

silk hat, gold-headed cane, he was the ideal figure of a cultured, elegant gentleman.

Dr. James H. Southall was professor of the institutes of medicine. He was born at Williamsburg, Virginia, and as a young man served in the Fifty-fifth Virginia Infantry from its organization until the surrender at Appomattox. He was graduated afterwards from the University of Louisiana School of Medicine, now Tulane University. He located in Memphis, coming later to Little Rock. Dr. Southall was popular and regarded as a very scientific member of the profession. Generations of young men who sat under his lectures will never forget Dr. Southall.

One of the most picturesque of the founders of the School of Medicine was Dr. R. G. Jennings, a citizen of Maine who studied medicine under Dr. Alonzo Garcelon, afterwards Governor of Maine. Dr. Jennings' Maine upbringing and Yankee ancestry did not prevent his putting on the gray uniform and becoming a devoted Confederate soldier. All of us remember him as a genial and loveable man.

Dr. Claibourne Watkins, professor of chemistry and toxicology, was a descendant of a distinguished Virginia ancestor, Dr. Watkins, who settled in Little Rock shortly after its foundation in 1830. His father was Chief Justice of the Supreme Court of Arkansas. While not a Confederate surgeon, Dr. Watkins served in the Confederate Cavalry. He afterwards studied medicine and was graduated from Jefferson Medical College in Philadelphia. He served afterwards as professor of clinical medicine in the School of Medicine. He had a mind rich in experience and was a progressive physician in every sense of the word. His activity as a teacher in the School of Medicine served only when age and illness compelled him to retire from practice.

(To be Continued)

BUNDLES FOR BRITAIN

As there have been several inquiries from members of the Society relative to contributions, either in money or instruments, to "Bundles for Britain" it may be that the following list will aid those who wish to contribute.

If one wishes to send instruments, mail to ALLIED RELIEF, BUNDLES FOR BRITAIN, 543 West 46th St., New York City, c/o The Dutchess of Leinster, with value marked plainly on package, also "For Export." If money is to be donated, mail to "Bundles for Britain," 745 Fifth Avenue, New York City.

WORKMEN'S COMPENSATION IN RELATION TO MEDICINE

PETER A. DEISCH

Helena

The workmen's compensation law, which became effective in Arkansas on December 5, 1940, makes all employers of 5 or more persons (or 2 persons when employed by a contractor) liable for any accidental injury received by the employee. It does not apply to agricultural workers, to casual workers, to domestic service, or to vendors of newspapers or magazines.

Its functions will be administered by a board of 3 men, known as the Commission.

Heretofore it was necessary for an employee to establish negligence on the part of the employer, and that such negligence was the proximate cause of the injury in order to secure redress in case of injury. The remedy of the injured person for accidental injury or death is now fixed and certain, and payments to the employee will be made promptly, at the time when they are most urgently needed.

Every employer is required, under heavy penalties, to secure the payment of the awards, which will usually be done through insurance companies or carriers. There are two modes of procedure by which the compensation case may be disposed of and closed. First, will be to have a hearing before the Commission, or referee, and an award made. Physicians will receive extra fees for appearing at the trial of these cases. The other method is a simplified one in which an employer, or his carrier, can make a settlement agreement with the injured employee, thus closing the case. This settlement agreement must be submitted to the Commission for approval, and must be accompanied by a physician's report, sufficiently definite in form for the Commission to determine if the proper amount of compensation has been agreed upon. Because the method of disposing of a case by settlement agreement is a convenient, economical and speedy mode of procedure which can be had without the parties appearing before the Commission, it will probably be used in the majority of cases.

The efficiency of the law will, to a considerable extent, depend on the medical profession, as it is believed that about a quarter of all benefits paid by the employer will be in the form of fees for medical, surgical and hospital services, crutches, apparatus and medicines.

Injuries causing loss of work for 7 days or less are not compensable in money to the employee, but medical attention and hospitalization must be paid by the employer. In the case of severe injuries the employer must provide attendance and treatment, nurse and hospital services, apparatus and medicine, as may be necessary during 60 days after the injury, or for such time in excess thereof as in the judgment of the Commission may be required. There is no limit placed on the amount of such charges, save that whoever renders such treatment or service "shall submit the reasonableness of the charges to the Commission for its approval, and such charges shall be limited to such charges as prevail in the same community for similar treatment." However, the employer shall not be liable to make any of the payments for medical and hospital services in case of a contest of liability where the Commission shall decide that the injury does not come within the terms of the law. The employer is not liable unless the injury is one "arising out of and in the course of employment." That phrase will be an important one in determining the liability of the employer, not only to pay money damages, but to be liable for medical services. For instance, if employees were to get into a fight and one of them got hurt, the employer would not be liable, for it would not be one "arising out of and in the course of employment." Observe the word "and" in the phrase, for the injury to be compensable must be one arising out of **and** in the course of employment. All such charges are enforceable against the employer, and they are in addition to the money payments which will be made to the employee.

Bills for medical, nursing and hospital care will be rendered to the employer or to the "carrier." If the latter object to the amount charged, an appeal is taken to the Commission, and the advice of the medical board will largely influence the Commission in arriving at the reasonableness of the charge. The Commission is authorized to appoint a medical board of 3 physicians, who shall be qualified to diagnose and report on occupational diseases. They will be employed for special call service, and shall be paid on a scale of \$15 per day, and their reasonable and necessary traveling expenses.

The charge should be based upon the patient's standard of living, and determined as if the treatment were to be paid for by himself. In fixing the charge, the absence of risk of nonpayment is also taken into consideration, a

point of some importance in its subsequent effect on the fixing of fee schedules. The fee schedule is a matter of great importance, for if the fees are reduced to offset greater security of payment, they then tend to become standards for all grades of practice. It should not be based on the minimum standards of the minimum community and then be applied to statewide conditions.

As responsibility for payment is upon the carrier, records and reports will be required from the physician to the source of payment. When action in regard to other financial transactions is based on the judgment of the physician, these reports grow longer and more numerous. Judging from the laxity in filling out the recent preparedness questionnaires in our state, it would seem to be a common characteristic of the majority of physicians to dislike "paper work." This attitude, if persisted in, may be a contributing factor in causing compensation practice to drift into hands of the more business minded members of the profession.

The physician will be asked to make an immediate report of the accident. Later, he will be asked to describe the injury in detail and probably to make a prognosis of the probable extent of disability.

There is no question of the necessity of reports if the machinery of the compensation system is to work. The tendency of the private practitioner to be neglectful of such reports is one of the reasons why employers and insurance carriers try to confine compensation practice to those physicians who specialize in such work and are consequently prompt and thorough in fulfilling these regulations.

Where injuries cause loss of work for more than 7 days, then the employee is paid for all time lost, including the first 7 days, in an amount equal to 65% of his average weekly wages for the preceding year, providing that no payment shall be less than \$7 a week or more than \$20 a week, for a period of not longer than 450 weeks, but the maximum amount shall be not more than \$7,000.

The principal difficulty probably will be in determining the probable duration of the incapacity to work of the employee. The Commission shall determine its award from the opinion of medical men; therefore they will have to come to some conclusion as to how long the injured person will probably be unable to work. The award is arrived at shortly after the injury, and the compensation which the employee shall

receive is then determined, and not after the duration of the disability. In the case of permanent disability, the physician will be called upon to give his opinion as to the approximate extent of permanent loss of function.

A medical board will make its findings which will be considered by the Commission and the testimony of doctors for both the employee and the employer will be considered in case of a contest.

In many injuries there will be no controversy as the law specifically fixes, arbitrarily, the compensation to be paid for certain designated injuries; for instance, loss of arm, 200 weeks compensation; loss of foot, 125 weeks compensation; loss of leg, 175 weeks compensation; loss of hand, 150 weeks compensation.

A somewhat difficult subject will be a claim for hernia, as to obtain compensation it must be shown that the descent of the hernia immediately followed as the result of sudden effort, or the application of force directly to the abdominal wall; that such prostration resulted so that the employee was compelled to cease work immediately. In this case, the claimant must give notice to the employer within 48 hours after such occurrence, and that the distress was such as to require the attendance of a physician within 48 hours after such occurrence.

In every case of hernia as above defined it shall be the duty of the employer forthwith to provide the necessary treatment to effectuate a cure by radical operation not exceeding the sum of \$250, and to pay compensation for not longer than 26 weeks. In case the employee shall refuse to permit such operation, it shall be the duty of the employer to provide all care necessary, and to supply such mechanical appliance to enable the employee to resume work, not exceeding \$250, and shall pay compensation not exceeding 13 weeks.

Occupational Diseases

Where an employee suffers from an occupational disease, and is thereby disabled from performing his work, or dies as a result of such disease, and the disease was due to the nature of an occupation, the employee or, in case of his death, his dependents, shall be entitled to compensation as if such disablement were an injury by accident.

Occupational diseases are specified to be: Poisoning by agencies specified in the act, anthrax, blisters caused by prolonged or repeated use of tools, synovitis or bursitis due to an occu-

pation involving repeated pressure on the parts affected, chrome ulceration, compressed air illness, dermatitis, X-ray exposure, diseased condition of eyes due to electric welding, and cataract in glass workers, cancer or ulceration of the skin caused by such products as tar, glanders, infectious or contagious disease contracted in the course of employment in a hospital, miner's nystagmus incurred in underground work, asbestosis, silicosis.

An employer shall not be liable for any compensation for an occupational disease unless such disease shall be due to the nature of an employment in which the hazards of such disease actually exist and are characteristic thereof.

Let the physician make careful reports touching all angles of inquiry with the greatest possible dispatch, and in the case of amputations stating the exact point at which the amputation was made, for the reason that the removal of the slightest amount of bone in a joint may affect the amount of compensation due. If this is done, and physicians use their best endeavors to assist the Commission, particularly in its formative stages, we will achieve good results for all. In the states where there has been a careful, painstaking and statesmanlike work and attitude over a sufficient length of time by committees of the state society, there has nearly always been a comparatively harmonious and satisfactory solution. Only in one state, apparently, is a medical man a member of the Commission with any voice in the decisions, but good results for all concerned can be achieved by patient and tactful consideration of the others' viewpoint.

The main hope of organized medicine lies in the integrity of the basic unit—the county medical society. One's medical allegiance is to the county society first; the hospital staff meeting, the informal cloak-room conference, the specialist group meeting, the section or branch societies, where they exist, should not be permitted to usurp loyalty to the county medical society. They are primarily for the advancement of scientific medicine. By and through the county medical society, the general interests of the profession must stand or fall. Without strong co-operative county societies, neither the state or national medical associations can render their most effective service. In the common interests of all, never were the active support of and loyalty to the county medical society of greater moment.—The Journal of the Michigan State Medical Society.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

SIXTEEN and one-half million men have registered for military service. Almost one million of them have thus far been selected. According to news reports the men will be subjected to a hardening process to the point where they will be able to march 30 miles per day bearing full equipment. It is highly important that among them there shall be none who, because of a tuberculous focus, will crack under the strain. So that costly lessons, learned during the World War may not go unheeded, Spillman in an article in the Journal of the American Medical Association summarizes the methods employed to discover tuberculosis, calculates the enormous cost of service-acquired tuberculosis and discusses what should be done to safeguard the nation's manpower and financial resources against the enemy which bores from within.

TUBERCULOSIS AND MILITARY SERVICE

The World War is 22 years behind us, yet the federal government pays in compensation for tuberculosis that originated in service about \$3,000,000 each month. Analysis of voluminous and complicated federal reports dealing with service-acquired tuberculosis yields the following approximate figures:

Cost of vocational training	\$129,000,000
Insurance	130,000,000
Compensation	600,000,000
Hospital care	100,000,000
	<hr/>
	\$959,000,000

The total number of men compensated for tuberculosis in 1922 (it is not feasible, from the annual reports, to run the figures back past 1922) was 36,600. In 1939, the total number was 55,634, including 1,947 deaths for that year.

The cost of taking a man who has tuberculosis into the service cannot be accurately calculated because of many factors that are still unknown and costs that are not apparent, but the author estimates that the figures would be somewhere around \$10,000 per man to date, certainly not less than \$7,500, to which should be added at least \$50 a month for the rest of the man's life and compensation for his dependents after death.

Study of army procedure during the World War leads to the conclusion that the methods employed for the detection of tuberculosis were inadequate. This does not detract from the

stature of that distinguished army surgeon, Colonel George E. Bushnell, the advisor to the Surgeon General on all matters pertaining to tuberculosis. It was the consensus of experts in 1917 that adult exogenous infection with tuberculosis is rare, that infection in childhood is well nigh universal and that every infection confers an immunity to anything short of massive doses of bacilli in later life. By the same token, adult tuberculosis was held to result from a reactivation of the antecedent infection. It was thought that for every soldier who had incurred tuberculosis as a result of military service, 10 others had brought the disease with them into the army. Present-day experience does not uphold this belief—to cite at random just one of numerous communications, Diehl and Myers prove the development of 6 cases of tuberculosis in one college fraternity a year after one of its members was found to have a positive sputum, and the development of tuberculosis in a girl several years after her sorority roommate was found to have tuberculosis.

The problem at hand is this: How can the recruit who already has active tuberculosis be recognized, that he may be rejected for the protection of himself and others? Colonel Bushnell trained a large number of highly competent diagnosticians, to whom he imparted the significance of the post-tussal moist rale and the technic of eliciting it. The patient is instructed to cough gently at the end of deep expiration.

When he inhales after the cough the rale is heard. The presence of persistent moist rales was the criterion for determining the existence of tuberculosis. Several prominent physicians and radiologists tried to induce the Surgeon General to make the radiograph the decisive factor in the diagnosis of pulmonary tuberculosis. The practical difficulties in the way of the adoption of the radiograph were, however, insuperable, according to Colonel Bushnell, in which conviction he was supported by a special committee of the Council of National Defense which investigated the question. Among the difficulties were the enormous cost of photographing, the impossibility of obtaining a sufficient number of plates (made of glass and most of it imported from Belgium) and the lack of trained radiologists.

Draft boards set up in every community added to the difficulty. These boards included local physicians who were supposed to reject draftees with disqualifying defects. While most draft boards functioned honestly and intelligently there is evidence in official publications that, far from weeding out the manifestly tuberculous, some boards actually concentrated tuberculosis at some of the camps, thinking that they would benefit by change of climate and by army life. In the re-examination of 19,827 men at Camp Kearny, for example, 853 cases of tuberculosis (4.83%) were discovered.

With this background, what should our procedure be in the present situation? Of the available methods for the mass diagnosis of tuberculosis among recruits, physical examination and radiography need to be considered on a basis of relative merits. Evidence of the inadequacy of physical examination to detect tuberculosis is overwhelming. The last word so far as the army was concerned in 1917 was that "the only trustworthy sign of activity of apical tuberculosis is the presence of persistent moist rales." In the light of present-day knowledge this sign is worth only about 12.5%. In spite of the acknowledged skill of the army examiners of 1917 only about one-eighth of the actually existent clinically significant tuberculosis was detected.

The radiograph should be the criterion in weeding out tuberculosis in today's mobilization. In what form? Fluoroscopy gives no record and is highly subjective. As demonstrated by the

experience of a large life insurance company, fluoroscopy in skillful hands may serve as an alternative to a prohibitively expensive routine of roentgenography, but even this company has, since 1936, been making routine roentgenograms of the chest of every applicant for employment.

The paper roentgenogram is speedy and convenient and cheaper than celluloid. Radiologists as a whole do not favor the paper radiogram while tuberculosis workers are enthusiastic over it. If celluloid films were available on rolls like the paper rolls they would undoubtedly be preferred. Paper roentgenograms are vastly preferred to no roentgenograms but celluloid would be preferred if the author were given a choice.

Photography of the fluoroscopic screen is another possibility. But if this method, known as fluorography, is no more than 90% efficient as compared with the standard celluloid roentgenogram, as the author believes, the 10% shortage in diagnosis would cost a great deal of money in compensation later. Fluorography is today a highly promising method but awaits further improvements before it can compete with celluloid roentgenograms.

For radiography there are many kinds of apparatus varying in price and capacity. What is most important, however, is the skill and knowledge of the operator.

The author's final conclusion is:

"A normal chest roentgenogram should be the criterion of acceptance in a future mobilization, including the proposed draft for training, and it should be made and reported before the recruit has spent a night away from his own roof to obviate a repetition of the claims for aggravation of pre-existing tuberculosis which occurred during and after the World War."

The Value of Radiography in Detecting Tuberculosis in Recruits, Ramsay Spillman, M. D., *Jour. of Amer. Med. Assn.*, Vol. 115, No. 16, October 19, 1940.

COMING MEDICAL MEETINGS

Mid-South Post Graduate Medical Assembly, Memphis, February 11-14, 1941.

Arkansas Medical Society, Little Rock, April 14-16th, 1941.

American Medical Association, Cleveland, June 2-6th, 1941.

THE JOURNAL

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EDITORIALS

GENERAL PRACTICE A SPECIALTY

R. B. ROBINS, M. D.

Most of the specialists today have special boards which grant them certificates showing that they are qualified for their particular field of work. Possibly it would be an incentive for greater effort and better qualifications if the general practitioner had such a board granting him a certificate recognizing his competence. One of the greatest means of combating the high cost of medical care and social medicine is the production of more and better qualified general practitioners in medicine. It is well recognized that most of the diseases that affect the human body can be properly handled by the qualified general practitioner. (Possibly 10% need the services of a specialist.)

No man can afford to so specialize himself that he knows only one particular organ of the body. The tree of knowledge in medicine is such that every branch and leaf must be con-

nected with the trunk in order to live. Super-specialization in medicine has been one great factor that has precipitated an attack on medicine in the past few years.

Are we having an increase of knowledge or an increase in ignorance? That question has been interestingly dealt with by David Daiches of the University of Chicago, recently. The more knowledge there is in the world, the more ignorant the individual is. As knowledge increases, ignorance increases, because it is difficult for one individual to know more than a small percentage of what there is to be known. In ancient times it was possible for an individual to know practically all that there was to be known in the arts and sciences, but not so today. In the future individuals will become more and more ignorant in comparison to the sum total of human knowledge.

All of this is a challenge to the man in medicine, especially the man in general practice. Our medical schools must pay particular attention to their selection of students so that men who enter medicine are selected because of the fact that they are inherently students. Graduation from medical school is the beginning of a lifetime devoted to constant study.

General practice is our greatest specialty in medicine today and as time goes on the general practitioner's responsibility as far as study is concerned will be greater and greater.

MEDICAL PREPAREDNESS

In the task of preparing America for positive national defense, a tremendous burden has been placed upon organized medicine to see that medical services are available to both the civilian and to the military populations. Recognition has been given the organized profession by governmental authority and the request has been made that these phases of the problem of defense be handled by those most competent—the county, state and national medical societies. To this end, committees on medical preparedness have been formed in all components. The first step toward a proper medical preparedness was the compilation of the preparedness questionnaire from each physician. In Arkansas the record shows approximately 80% return of the form by physicians; not an enviable record, but a continuing effort will surely bring a more nearly perfect record.

The second step concerns the availability of medical men for service with either the military or with the civilian population. County preparedness committees have been asked to make a thorough survey of the medical power of their respective localities with this in mind so that an equitable division of physicians may be maintained. While supplying the armed forces with medical officers is important, it is no less important that the needs of the civilian population and of industry not be ignored. The responsibility here is great. County medical society committees will shoulder this responsibility and render a great service to the country.

EDITORIAL COMMENT

The third annual Congress on Industrial Health sponsored by the American Medical Association will be held Monday and Tuesday, January 13th and 14th, 1941, at the Palmer House in Chicago. The subject of industrial health is of exceptional interest at this time when national preparedness depends so greatly on industrial production. The programs of the conference are designed to acquaint the physician with the rapidly expanding importance of preventive medicine and surgery as applied to industrial organization. This year's Congress will be of particular interest to Arkansas physicians because of the newly-enacted workmen's compensation law, the provisions of which are only now becoming known to physicians generally within the state. It is hoped that Arkansas may have a representative delegation in attendance.

WHAT CONSTITUTES AN ACCEPTABLE CONTRACT TO RENDER MEDICAL SERVICE?

A contract must be legal, equitable and ethical.

The following fundamentals should be embodied in any contract to render medical service:

1. The compensation received must be based on the usual fee paid for the same quality of service in the same community.
2. The compensation must not be so low that the physician cannot render adequate medical service.
3. It should be required that the fee be paid promptly and without discount.
4. There should be no competitive bidding to secure contract.

5. There shall be no solicitation of patients, either directly or indirectly by agent or advertising.

6. The free choice of a physician must not be denied those cared for in a community in which other qualified physicians are available.

7. The contract must not tend to lower the standard of medical practice and medical ethics.

8. The nature of contract practice must not tend to commercialize or socialize medical service.

Committee on Medical Contracts,
S. W. Douglas, Eudora, Chairman,
H. E. Murry, Texarkana,
Euclid Smith, Hot Springs.

RESOLUTION

Whereas, God in His infinite wisdom has removed from our midst Doctor Archibald Monroe McKennon,

Whereas, Doctor McKennon was born November 19, 1851, at Fayetteville, Tennessee, and moved to Berryville, Arkansas, when an infant. He came to Clarksville in 1870, was graduated from Jefferson Medical College, Philadelphia, in 1874, and was one of the leading physicians of Johnson county until he retired from practice on January 1, 1903, to lead a successful business career. He was the last surviving charter member of the Johnson County Medical Society. He was one of the founders of the College of the Ozarks in Clarksville.

Therefore, Be It Resolved, That we express to his beloved widow, sorrowing relatives, and friends our deepest sympathy and regrets.

J. M. Kolb, President.
G. Reginald Siegel, Secretary.

J. S. Kolb,
Earle H. Hunt,
Resolutions Committee.

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Northwest Arkansas eye, ear, nose and throat practice with equipment of deceased physician. Established 17 years. Equipment, furniture and surgical instruments appraised at \$1,526. Cash or reasonable terms. Address—EENT, The Journal of the Arkansas Medical Society, Fort Smith, Arkansas.

PROCEEDINGS OF SOCIETIES

The Washington County Medical Society was addressed December 3rd by Ralph E. Crigler, Fort Smith, on "Office Treatment of Rectal Diseases."

The Ninth Councilor District Medical Society met at Harrison, December 3rd for the following scientific program: "Sulfanilamide, Sulfapyridine and Sulfathiazol," D. L. Evans, Jr., Springfield, Missouri; "Some of the Difficult Every-Day Problems of Obstetrics and Gynecology," E. H. White, Little Rock; "Neurosis," Pat Murphey, Little Rock, and "The University of Arkansas School of Medicine," S. P. Cromer, Little Rock. The Society will next meet at Harrison in June.

Jefferson County Medical Society has elected the following officers: President, Fred Hames; Vice-President, J. W. John, and Secretary-Treasurer, A. R. Russell.

The Pulaski County Medical Society met December 2nd for the President's Address, "What of the Future," by H. W. Hundling.

E. H. White, Secretary.

The Annual Conference of the Arkansas State Board of Health was held at Little Rock, December 9-11th. Speakers were: H. T. Smith, McGehee; K. W. Cosgrove, Little Rock, "The Progress of the Trachoma Control Program in Arkansas"; W. P. Scarlett, Morrilton, "Program Planning in the Conway County Health Department"; L. L. Fatherree, Little Rock, "Program Planning in the Little Rock Health Department"; L. K. Hundley, Little Rock, "Trachoma Control Program in Arkansas"; J. T. Herron, Hamburg, "Present Status of Diphtheria Immunization"; A. M. Washburn, Little Rock, "A Recent Epidemic of Typhoid Fever in Carroll County"; L. M. Zell, Little Rock, "Venereal Disease Program Study in Little Rock Health Department"; A. C. Modelevsky, Jonesboro, "School Health Program by a Minimum County Health Unit"; W. Myers Smith, Little Rock, "Report of the Division of Maternal and Child Health"; V. T. Webb, Little Rock, "The Conduct of Well-Child Conferences in the Little Rock Health Department"; H. L. Fuller, Little Rock, "The Use of the Skin Test in the Tuberculosis Program," and D. W. Dykstra, Little Rock, "The Place of Gonorrhea in a Public Health Program."

Johnson County Medical Society has elected the following officers: President, J. M. Kolb; Vice-President, R. H. Johnston, and Secretary-Treasurer, G. R. Siegel.

The Ouachita County Medical Society was addressed December 5th by H. E. Mobley, Morrilton, "Infections of the Hand," and C. Ray Williams, Morrilton, "X-ray of the Chest." The Society adopted a resolution asking the Council of the Arkansas Medical Society to refrain from making any definite fee schedules under the Workmen's Compensation Act.

R. B. Robins, Secretary.

Pulaski County Medical Society has elected the following officers: President, E. H. White; Vice-President, Alan G. Cazort; Secretary, T. Duel Brown, and Treasurer, R. J. Calcote.

Craighead-Poinsett County Medical Society has elected the following officers: President, M. E. Blanton, Jonesboro; Vice-President, J. C. Farris, Jonesboro, and Secretary-Treasurer, M. L. Cantrell, Marked Tree.

The Jefferson County Medical Society was addressed in November by Charles Greenblat, of the University of Georgia, on "Sex Hormones in Women."

Polk County Medical Society met December 18th, electing the following officers: President, B. M. Hawkins, Mena; Vice-President, H. G. Heller, Mena; Secretary-Treasurer, J. G. Hilton, Mena; Delegate, B. M. Hawkins, and Alternate, E. M. Miers, Mena. The Society voted disapproval of the present plan of Farm Security Administration medical care. The Society will meet for an evening dinner session the third Wednesday of each month in the future.

J. G. Hilton, Secretary.

Hempstead County Medical Society has elected the following officers: President, J. E. Gentry; Secretary-Treasurer, Jim McKenzie; Delegate, A. C. Kolb, and Alternate, Don Smith.

Mississippi County Medical Society has elected the following officers: President, J. T. Polk, Keiser; Vice-President, T. K. Mahan, Blytheville, and Secretary-Treasurer, F. D. Smith, Blytheville.

The Sebastian County Medical Society met December 10th, electing the following officers: President, Hugh Johnson; Vice-President, H. C. Dorsey; Secretary, W. F. Adams, and Treasurer, W. R. Brooksher. Carl Wilson read a paper on "Prostates."

W. F. Adams, Secretary.

St. Francis County Medical Society has elected the following officers: President, N. C. McCown, Forrest City; Vice-President, M. L. McLendon, Palestine; Secretary-Treasurer, J. O. Rush, Forrest City.

The Independence County Medical Society met December 9th, electing the following officers: President, J. J. Monfort; Vice-President, I. M. Huskey; Secretary-Treasurer, W. J. Ketz; Delegate, C. A. Churchill, and Alternate, Paul Gray. The following papers were presented: "Principles of Fractures," F. Q. Wyatt; "Principles of Treatment of Pneumonia with Sulfthiazol and Sulfapyridine," Paul Gray, and "Orr Treatment of War Wounds Being Extended to Civil Traumatic Surgery," J. J. Monfort. The Society voted to discontinue participation in the Farm Security Administration plan of medical care December 31st, 1940.

J. J. Monfort, Secretary.

Nevada County Medical Society has elected the following officers: President, J. B. Hesterly; Vice-President, G. G. Hairston; Secretary-Treasurer, L. J. Harrel; Delegate, A. S. Buchanan, and Alternate, J. B. Hesterly.

Bradley County Medical Society has elected the following officers: President, W. B. Reasons, Hermitage; Vice-President, Rufus Martin, Warren; Secretary-Treasurer, W. J. Hunt, Warren; Delegate, W. N. Roark, Hermitage, and Alternate, W. J. Hunt.

Faulkner County Medical Society has elected the following officers: President, L. L. Hassell; Vice-President, E. L. Dunaway, and Secretary-Treasurer, J. S. Westerfield. Dr. Westerfield has served as secretary of the society since 1902 with the exception of three years, in one of which he was president.

PERSONALS AND NEWS ITEMS

The Journal regrets that an oversight caused omission of the name of J. S. Wilkins, Hot Springs National Park, from those who were in attendance at the Louisville session of the Southern Medical Association.

R. B. Robins, Camden, addressed a recent meeting of the Hampton P.-T. A. on "Physical and Mental Health."

The following have reported for active duty with the Medical Corps, United States Army: O. G. Hirst, Prescott; T. L. Adair, Bald Knob; James W. Branch, Hope; B. P. Briggs, Little Rock; H. D. Fowler, Little Rock; Elmer J. Ritchie, North Little Rock, and T. S. Van Duyn, Stuttgart.

"The Physician's Responsibility" by President H. T. Smith appeared in the November issue of The Mississippi Doctor.

Ralph E. Weddington has been transferred from Melbourne to Batesville where he will be director of the Independence County Health unit.

The following attended the American Academy of Pediatrics at Memphis during November: E. C. McMullen, Pine Bluff; Chas. Wallis, Madeline Melson, Sam Phillips, and W. R. Parsons, Little Rock.

Fred H. Krock, Fort Smith, read "Arrhenoblastoma" before the Southern Surgical Association in Hot Springs, Virginia, in December.

J. O. Rush, Forrest City, was recently elected second vice-president of the Arkansas Society for Crippled Children.

J. D. Riley, State Sanatorium, addressed the Johnson County Tuberculosis Association, November 25th on "Tuberculosis as a Problem that Concerns the Laity."

M. C. John, Stuttgart, has been reappointed a member of the Board of Trustees of the State Sanatorium.

Ralph Hamilton is erecting a clinic building at West Memphis.

MARRIED—At Fort Smith, November 3rd, Roy E. Schirmer and Miss Coye Pearce.

E. F. Ellis, Fayetteville, and A. J. Harrison, Springdale, were recently honored at a dinner given by Mr. and Mrs. John Means at Spring Valley.

The new county health building at Pine Bluff has been named the "W. H. Bruce" building in recognition of the work of Dr. Bruce in Jefferson county.

D. W. Dykstra addressed the Charleston Commercial Club recently on "Syphilis."

Dr. and Mrs. C. K. Townsend, Arkadelphia, attended the 25th reunion of his class at Tulane University recently.

BORN—To Dr. and Mrs. John Redman, at Mount Ida, a son, on November 21st.

C. R. Chestnutt, Little Rock, attended clinics in Saint Louis during December.

Clyde McNeil has been elected commissioner at Rogers.

F. Walter Carruthers, Little Rock, addressed the New York Academy of Medicine on "Fractures of the Pelvis," December 26th.

BORN—B. P. Briggs, Jr., to Dr. and Mrs. B. P. Briggs, Little Rock, on December 1st.

F. M. Burton, Hot Springs National Park, has been ordered to active duty with the Medical Corps, United States Army, and assigned to Camp Robinson.

J. D. Riley, State Sanatorium, addressed the Paris Rotary Club recently on "Problems of Physical Well Being."

The Dermott Municipal Hospital has elected the following officers: Chief of Staff, H. T. Smith, McGehee; Vice-Chief of Staff, E. E. Barlow, Dermott, and Secretary, B. E. Barlow, Dermott.

R. H. Willett has been elected a director of the Jonesboro Country Club.

D. W. Goldstein, Fort Smith, attended the recent meeting of the American Academy of Dermatology and Syphilology in Chicago.

R. M. Blakely has been elected a school director at Little Rock.

A. K. Wayman, Little Rock, has been appointed superintendent of the Pulaski County Hospital.

The following have been appointed county chairmen in the Fight Infantile Paralysis campaign: W. J. Blackwood, Rector; C. L. Harris, Melbourne, and H. O. Walker, Newport.

E. M. Nixon, formerly health director of Mississippi county, has become associated with Jos. F. Shuffield at Little Rock.

Ralph M. Sloan recently addressed the Jonesboro Rotary Club on "Rotary Information."

B. R. Teeter, has been named selective service examiner for Pope county.

Joe F. Rushton, Magnolia, has been elected a director of the Hospital for Crippled Adults at Memphis.

J. D. Huskins, Siloam Springs, has been called to active duty with the Army Medical Corps and assigned to the 48th Medical Battalion, 2nd Armored Division, Fort Benning, Georgia.

F. M. Burton, Hot Springs National Park, has been called to active duty with the Army Medical Corps and assigned to Camp Robinson, Arkansas.

"WHEN BOBBY GOES TO SCHOOL" MAY BE SHOWN TO PUBLIC BY ANY LICENSED PHYSICIAN

Under the rules laid down by the American Academy of Pediatrics, their new educational-to-the-public film, "When Bobby Goes to School," may be exhibited to the public by any licensed physician in the United States.

All that is required is that he obtain the endorsement by any officer of his county medical society. Endorsement blanks for this purpose may be obtained on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

Such endorsement, however, is not required for showings by licensed physicians to medical groups for the purpose of familiarizing them with the message of the film.

"When Bobby Goes to School" is a 16-mm. film, free from advertising, dealing with the health appraisal of the school child, and may be borrowed without charge or obligation on application to the distributor, Mead Johnson & Company, Evansville, Indiana.

OBITUARY

HARRY HANSELL PRESTON, age 38, died at his home in Hot Springs National Park, December 8th after an illness of six months. Born at Bay, Arkansas, August 18, 1902, he moved to Hot Springs National Park with his parents in 1916. Graduating from the Hot Springs High School in 1922, where he was captain of the football team in 1920 and 1921, he attended Tulane University of Louisiana, receiving his medical degree in 1928. Subsequently he spent two years as an interne in Charity Hospital, New Orleans. He began the practice of dermatology in Hot Springs National Park in 1930. In addition to his membership in the Garland County Medical Society, the Hot Springs Academy of Medicine, and the Arkansas Medical Society, he was a fellow of the American Medical Association and a member of Saint Luke's Episcopal Church and of the Masonic lodge. Surviving relatives are his wife and four daughters.

O. K. HUKILL, aged 67 years, died at his home in Egypt, December 14th after a short illness. Formerly a resident at Hot Springs National Park and a member of the Garland County Medical Society, he had moved to his present location about one year ago. He graduated from Barnes Medical College, Saint Louis, in 1903. Surviving him is his wife.

STERLING PRICE BOND, age 51 years, died at his home in Little Rock, December 5th following his retirement from active practice two years ago due to ill health. His education was obtained in the schools of Little Rock, the Episcopal High School at Alexandria, Virginia, the University of Arkansas, and Harvard University, obtaining his medical degree from the University of Arkansas School of Medicine in 1912. In addition to his membership in the Pulaski County Medical Society and the Arkansas Medical Society, he was a Fellow of the American College of Surgeons, and a member of the Masonic bodies and of the Christ Episcopal Church. Surviving relatives are his wife and a daughter.

RANDOM THOUGHTS OF THE SECRETARY

November 24th. Today we read in the daily paper that Pulaski County's sheriff-elect has decided to stay a few more days in the Army and Navy General Hospital as a post-tonsillectomy case because of the bad weather. We can not but wonder if all Little Rock hospitals were crowded, preventing the high sheriff from spending a week or so as a convalescent tonsillectomy patient with his clients and supporters, some of whom must have been physicians who are competent to perform a tonsillectomy and who pay taxes from which the sheriff will derive his livelihood in January.

November 28th. For our Turkey Day football we canvass the situation and decide that Muskogee (Oklahoma) High School played the best game we saw this season. So forth we go to watch them in action with Beaumont High School of St. Louis. Alas, the team we saw at Fort Smith was apparently another team and the snappy football with all its razzle-dazzle aerial game which we had expected failed to materialize. Too, dinner at the town's leading hostelry on crockery of a Victorian day was devoid of enthusiasm and gastronomic delight but the youngster's excitement over the game, the perfect football weather and a proper humility over the blessings for which we can be thankful combined to erase, in magnificent gesture, the minor annoyances of the occasion. So with a cheerful heart we count it a day of much joy and happiness and wish you more of the same.

November 29th. Today we speak to the Exchange Club on the qualifications of the physician and how he should be selected by the layman, departing in the belief that we have contributed something toward a better understanding of what manner of man a physician is.

December 4th. We get that "minister of health" we have sought these past few years. May it all work out for the best interests of those most concerned.

December 5th. Conferring with the workmen's compensation commission today, Barlow, McCaskill, Hawkins and Stroud. Pleased indeed at the cooperative spirit shown by the commissioners in this initial conference and departing hopeful for mutually satisfactory operation of the law. Proper medical care was emphasized as a vital part of the program and we confidently believe the commissioners desire to work in entire harmony with the organized medical profession. Visiting about the Donaghey Building before starting homeward and having our spirit of general cheer greatly helped by the gay and happy Rosenbaum youngsters with whom we have but a short elevator ride. With Woody at Russellville for dinner where newly-decorated interior has been combined with improved culinary procedure.

December 6th. The same mail brings the first 1941 membership assessments, these coming from F. D. Smith of Mississippi County and Jim McKenzie of Hempstead County. The Hempstead group pays up in full for 1941. Who will be next to gladden the old secretary's days?

December 8th. We step over another milestone in an eventful, happy life. On this occasion Amis brings two little glass bottles containing, of all things, perfume, but with a fascinating war story of origin. For our continued cheer, Wolfermann sends more incense to Lady Nicotine knowing we had no permanent intention of discarding its use, accompanying the gift with good wishes and a hope for better political sagacity, doubtless never to be acquired. Sophie Jones arrives late with a music box whose only tune is the national an-

them, all set to sound forth with these old bones comfortable in the sitting posture in a modern version of the structure which made Chick Sale famous.

December 9th. Comes news of the election of Harl White to the presidency of Pulaski County Medical Society and glad we are that his hard work over the years for our largest group has been recognized in fitting manner.

December 12th. About Saint Louis today pleased to note what a change the use of Arkansas coal has made in the atmosphere. Surely there can be no return to former coals, boycotts or not. With the youngster we make the rounds of the toy emporiums and award special mention to the ingenuity and tireless craftsmanship of Famous-Barr with its series of windows in the gay nineties pattern.

December 18th. With a bus load of coughing and sneezing passengers, certain to be a delight to epidemiologist Washburn in his studies, we are off this morning for a meeting of the Polk County Medical Society at Mena. Practically a 100% attendance with a similar ratio in payment of membership assessments offers even more delight to a state secretary, but the cordial cooperative spirit and enthusiastic affirmation to the ideals of organized medicine shown in this group would be an inspiration to any county society in the state. Aboard the Southern Belle for the homeward journey, faring on turkey amidst holiday decorations which even include the raisin bread to which cherries have been added, making this bit of the staff of life but a step or so removed from fruit cake.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Dear Auxiliary Members:

It has been such a pleasure to visit with you the past few months, to be in your meetings, and to discuss Auxiliary plans. I hope to visit the rest of you in January and February.

Now is a splendid time to review our objectives, to see how much has been accomplished and consider those phases of our work which must be accomplished in the next few months.

Our Board meeting may be held in January for our National President, Mrs. V. E. Holcombe, has written that she expects to be in Arkansas in January. Detailed plans will be mailed to you as soon as we have Mrs. Holcombe's schedule. We want everyone to come with all reports up-to-date. Let us make it a big meeting!

Christmas is in the air, and I want to wish each of you a happy, peaceful yuletide. May the real spirit of Christmas be yours, and may the New Year bring health and prosperity to you and yours!

Sincerely yours,

(Mrs. Alfred) Mary Louise Hathcock,
President, Woman's Auxiliary to the
Arkansas Medical Society.

Mrs. S. A. Thompson and Mrs. J. B. Jameson entertained the Woman's Auxiliary to the Ouachita County Medical Society on November 7th with a dinner meeting at the Ouachita Hotel. Following the dinner and business session, Mrs. Auther A. Herold, National Legislative Chairman, addressed the Auxiliary on medical legislation. Mrs. C. W. Garrison gave an inspirational talk on the work of the Auxiliary. Two past presidents of the Woman's Auxiliary to the Southern Medical Association were present.

The next meeting date will be the first Thursday in December.

The Woman's Auxiliary to the Washington County Medical Society met on November 15th at the home of Mrs. Friedman Sisco in Springdale for the monthly work meeting. Twenty wash cloths were made for the WPA Nursery School of Fayetteville. Although no business session was held, there was a discussion on future work meetings and a decision was made to sew for the Red Cross.

Mrs. H. H. Howze read an interesting paper on "Hemophilia: One of the Causes for Political Upheaval Throughout the Centuries."

The next meeting will be a dinner meeting, and will be held at the home of Mrs. Fred Morrow with Mrs. R. T. Henry as co-hostess.

Mrs. J. S. Southard was hostess for the November luncheon meeting of the Woman's Auxiliary to the Sebastian County Medical Society.

Those present were: Mrs. W. R. Brooksher, Jr., Mrs. M. E. Foster, Mrs. Minnie Fuller, Mrs. D. W. Goldstein, Mrs. Fred Krock, Mrs. E. C. Moulton, Mrs. S. P. Stubbs, Mrs. B. L. Ware, Mrs. J. L. Kellum, Mrs. C. H. Finney, and Mrs. Mable Scott.

Mrs. A. A. Herold, of Shreveport, National Health Chairman of the Woman's Auxiliary to the American Medical Association, was an interesting visitor at the Bowie-Miller County Medical Society Auxiliary meeting held at the home of Mrs. Harry E. Murry in Texarkana on November 22nd. Mrs. Herold, guest speaker at the meeting, spoke on the importance of health legislation and the important part that doctors are taking in the preparedness program.

Mrs. Herold was introduced by Mrs. William Hibbitts, of Texarkana, president of the Woman's Auxiliary to the Texas Medical Society.

The home was decorated for the occasion with beautiful fall flowers in bright colors, used artistically about the reception rooms. Co-hostesses with Mrs. Murry were: Mrs. Charles Adna Smith, Jr., Mrs. E. L. Beck, and Mrs. H. R. T. Mann.

At the close of the program, Mrs. Joe E. Tyson conducted a brief business session, after which guests were invited to the dining room, where the table, laid with a beautiful lace cloth, held a lovely center bouquet of bronze and gold chrysanthemums, garlanded with autumn leaves. Cakes and confections carried out the autumn color notes.

Mrs. Herold and Mrs. Tyson presided at the table.

Mrs. C. B. Erickson, president of the Woman's Auxiliary to the Shreveport Medical Society, and Mrs. A. F. Heard, of Shreveport, were also guests at the meeting.

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BOOK REVIEWS

Physical Diagnosis: By Ralph H. Major, M. D., Professor of Medicine in the University of Kansas. Second Edition. Revised. 464 pages with 437 illustrations. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$5.00.

The second edition of this deservedly popular work presents additions, especially in the chapters on the abdomen, the extremities and the genitalia. This is solely a book on physical diagnosis with no reference to laboratory aids. The photographs are excellent. Of considerable interest are verbatim reports of many medical discoveries included as masterpieces of descriptive writing. This is an ideal text for medical students and practitioners.

Methods for Diagnostic Bacteriology: By Isabelle G. Schaub, A. B., Assistant in Bacteriology, and M. Kathleen Foley, A. B., Bacteriologist, Diagnostic Bacteriological Laboratory, The Johns Hopkins Hospital, Baltimore. Pp. 303. Saint Louis: C. V. Mosby Company, 1940.

This is "a complete guide for the isolation and identification of pathogenic bacteria for medical bacteriological laboratories." It is a complete compilation of explicit directions for the handling of clinical autopsy material in which are incorporated the "tricks of the trade" in diagnostic bacteriology. The subject-matter is so well organized and so easily readable that even to the inexperienced laboratory worker, there is little room for confusion.

Health under the "E"—The story of the Bellevue-Yorkville Health Demonstration in Mid-town New York: By E. E. A. Winslow and Saeul Zimand. Harper and Brothers, \$2.25.

This is a narrative report describing briefly the history of New York City, and in some detail the population and health problems of the Bellevue-Yorkville District. This district was selected for an experiment in neighborhood health promotion which has continued through the past ten years. The Milbank Memorial Fund provided most of the money and a building to house under one roof and to coordinate the public health, some medical, recreational, and social service activities of the community. Following the demonstrated success of the plan, the activities and results of which are reported in detail, nine similar centers have been developed throughout New York City, and the idea is spreading over the country. The subject-matter would make a good paper or report but unfortunately it has been expanded into a book through the inclusion of unnecessary details.

Principles of Surgical Care—Shock and Other Problems: By Alfred Blalock, M. D., Nashville, Tennessee. Pp. 308. 13 illustrations. Price \$4.50. St. Louis: C. V. Mosby Company, 1940.

General principles in the pre-operative and post-operative care of surgical patients are discussed in this little volume. An operation, of itself, is, as we all know, only part of the care of a surgical patient. Pre-operative and post-operative care is a most important consideration. Such subjects as the following are interestingly discussed: anesthesia, surgical technique and the treatment of

wounds; shock; disorders of the circulatory system; metabolic and nutritional disturbances; post-operative pulmonary complications; and abdominal as well as other complications. The author recently received the Research Medal of the Southern Medical Association for his studies in the field of shock. This volume should be in the library of every surgeon.

Office Urology: By P. S. Pelouze, M. D., Assistant Professor of Urology, University of Pennsylvania; Consulting Urologist, Delaware County Hospital; Special Consultant to United States Public Health Service; Member of Board of Directors, American Social Hygiene Association and American Neisserian Medical Society. 766 pages with 443 illustrations, 19 in color. Philadelphia and London: W. B. Saunders Company, 1940. Cloth, \$10.00.

This volume is well prepared and is especially valuable to the general practitioner who frequently does office urology and is thereby acquainted with the proper diagnosis and treatment of these conditions. The discussion of the effects of lack of drainage in the prolongation of infection is a feature as is the differentiation of pathological and physiological neuroses and sexual variations. This is a most valuable work on the subject.

Taber's Cyclopedic Medical Dictionary Including a Digest of Medical Subjects: By Clarence Wilbur Taber and associates. 273 illustrations. Thumb-indexed. Price \$3.00. Philadelphia: F. A. Davis Company, 1940.

This medical dictionary has been written by a staff of fourteen medical specialists and is a dictionary of medical subjects in addition to a medical dictionary. It is a desirable reference work for all medical personnel.

THE PLATFORM OF THE AMERICAN MEDICAL ASSOCIATION

The American Medical Association advocates:

1. The establishment of an agency of the federal government under which shall be coordinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy.
2. The allotment of such funds as the Congress may make available to any state in actual need, for the prevention of disease, the promotion of health and the care of the sick on proof of such need.
3. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.
4. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.
5. The extension of medical care for the indigent and the medically indigent with local determination of needs and local control of administration.
6. In the extension of medical services to all the people, the utmost utilization of qualified medical and hospital facilities already established.
7. The continued development of the private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability.
8. Expansion of public health and medical services consistent with the American system of democracy.

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No. 9

PREVENTION OF ABDOMINAL ADHESIONS*

J. K. DONALDSON, M. D.

Little Rock

Such a tremendous amount of work has been done upon the problem of abdominal adhesions; so many erroneous misconceptions have developed from time to time, that it has been exceedingly difficult for one to reach a true evaluation of the problem. And there has been some tendency in the past few years for some surgeons to place a considerable amount of reliance in instillation of substances within the abdominal cavity, concomitantly neglecting meticulous adherence to old but nevertheless true laws which must still be followed for most effective prophylaxis.

Significance of Adhesions. It is true that modern surgical conception is that the abdomen may be full of adhesions, and yet the patient will have no pain from them unless a viscus as gut, gall bladder, or stomach is obstructed. In other words, we no longer operate for vague abdominal pain upon the diagnosis of "adhesions" unless we feel pretty certain that a viscus is being obstructed to the extent that serious interference to well being, or chance of living, is present.

The incidence of postoperative obstructions from adhesions is sufficiently high, however, to warrant every reasonable effort toward prevention. And furthermore, it is a well-known fact that to leave the patient with an abdomen full of adhesions seriously interferes with the prognosis of any future abdominal surgery.

An Evaluation of Instillants

Substances which are now being rather widely instilled to prevent adhesion formation are papain, amniotic fluid and, to less extent, isotonic saline solution.

Papain. Kubota, a Japanese, several years ago conceived the idea that since papain is a

ferment similar to that ferment which is liberated by the polymorphonuclear cell after it breaks down, and that since ferments from the "poly" cell do absorb some fresh adhesions, papain solution instilled into the abdominal cavity might prevent adhesion formation. Ochsner and several other workers in this country followed up this conception and did considerable amount of work which they believed tended to confirm Kubota's theory.

Not long ago we did a considerable amount of work with papain by a method which we believed would permit a better evaluation of readings than any method which had been developed previously. Without further discussion of this point, suffice it to say that we feel confident that papain in its present available form is of absolutely no value in preventing either original adhesions or their recurrence after separation. A careful piece of research work done in one of the research institutes in Italy confirms our opinion.

Amniotic Fluid. We have had no personal experimental experience with this substance, but the author will state that the only case of post-operative obstruction which he has ever had in private practice resulted following an appendectomy when the peritoneal cavity was filled full of amniotic fluid at the time of operation. Furthermore we know of no experimental work which definitely proves amniotic fluid as being of value in preventing adhesion formation.

Saline Solution. Saline solution is of no direct value in preventing adhesions providing the fluid balance of the patient is kept up properly. If the gut is unusually dry when it is placed back into the abdominal cavity, instillation of saline can do no harm and may be of some value pending reestablishment of proper fluid balance.

Fundamental Etiologic and Patho-physiologic

Factors in Adhesion Formation

Before discussing in some detail the practical "Do's and Don'ts of Adhesion Prevention" a brief

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 17, 1940.

review of certain fundamental factors is indicated.

Bacteriologic Factors. It is of some interest to remember that all pyogenic microorganisms do not produce fibrin and adhesions to the same extent. Only the four most common microorganisms with which we had to deal in peritoneal infection will be mentioned here.

Gonococci or **Staphylococci** are prolific fibrin producers, the former especially. They both are very prone to produce a permanent type of adhesion.

Colon bacilli and **streptococci** are very poor fibrin producers. For example, if one has a case of pure streptococcic or colon bacillus peritonitis the prognosis is practically hopeless since for some reason the toxins of these microorganisms do not call forth sufficient fibrin to permit walling off of the infection. Fortunately, however, peritonitis from these microorganisms is usually mixed also with a staphylococci infection, which, by producing fibrin, enhances the prognosis.

Mention might be made also that it is true, as Hertzler has said, that the formation of adhesions in the peritoneal cavity is to an extent in **inverse** proportion to acuteness of the pyogenic infection. In other words, one may have a peritoneal cavity almost full of pus and yet have an amazingly small amount of permanent adhesion formation after subsidence of the infection.

Mechanical Factors. By far the most important factor in adhesion prevention still rests upon the old but frequently ignored law that **wherever the serosal covering within the abdominal cavity is permitted to remain broken** adhesion formation is almost sure to occur.

Additional mechanical factors of importance are drains, suture materials and packs.

Chemical Factors. Suffice it to mention for the sake of completeness, the well-known fact that chemically irritating substances as urine, bile, gastric juices even though sterile may produce adhesions. Chemicals in suture materials, as will be discussed further momentarily, often cause adhesions.

General dehydration or undue dryness of the gut predisposes.

"Do's and Don'ts of Adhesion Prevention"

Drains. Having considered above, in an abstract way, some fundamental factors pertaining to adhesion formation one may consider more specifically the more common factors related to the problem.

The Abdominal Incision. The type of incision one makes is of considerable importance. All

surgeons of experience are thoroughly familiar with the great frequency with which they encounter adhesions of the bowel or omentum along a previous incision site. Referring back to the law that wherever the serosal covering is **not** left intact one is almost sure to have adhesion formation, it is readily appreciated that when lines of tension pull against an incision in such a way as to tend to pull the peritoneum apart then one has a definite factor predisposing to adhesion formation.

Therefore:

Whenever practical, an incision should be made parallel with lines of tension of the abdomen.

The lines of tension in the abdomen run essentially parallel with the fibers of the internal oblique muscle.

It may be seen, therefore, that the right rectus incision cuts directly across the lines of tension and that these lines tend to pull the right rectus incision apart. Though the incidence of postoperative hernia is rather low in the average clean case when the right rectus incision is used, it nevertheless is easy to appreciate that when postoperative distention of the abdomen is present the strength of the pull tending to spread the incision is increased. And it is certainly a most common thing for the peritoneum to be torn or pulled at the suture lines in such cases postoperatively, thereby creating the raw surface which will give adhesion formation. This fact, stressed so definitely by Singleton and others, is one reason that the McBurney or some similar incision is again becoming popular in appendectomies. The advantages of the right rectus and midline incisions notwithstanding, it is also one reason that the oblique or transverse incision has been adopted by many in gall bladder surgery.

Certainly one cannot say that the right rectus incision has no place in surgery, and it would be a mistake to swing too far toward advocating its discard. However, it can be safely said that one should be thoroughly familiar with the factors just mentioned and when it is practical, adopt an incision running as nearly parallel as possible with the lines of tension in the abdominal wall.

The Place of the Tablespoon in Closure of Incisions. Since one wishes to approximate the peritoneum with as little trauma as is possible during closure of an incision, anything which will be of advantage in this regard is worthwhile. Several different devices have been invented to hold the bowel out of the field of the suture needle and enhance closure. One of the most

useful implements for this purpose is within the reach of everyone. It is the ordinary tablespoon.

As many of you know, one simply takes the sterile spoon and as he starts closure of a difficult wound places the spoon **closely against** the under surface of the peritoneum in that area of the incision which he is closing. He sews into the bowl of the spoon. If the spoon is properly placed it will keep the bowel out of the field, packs being used as usual, of course, to assist in controlling the bowel. The spoon has a very definite and worthwhile place in incision closure in difficult cases, assisting in minimizing the danger of tearing peritoneum and traumatizing bowel.

Importance of Everting Edges of the Incised Peritoneum. Surgeons commonly overlook the importance of this point. Since raw edges of peritoneum are a fertile invitation for adhesion formation it become obvious that some little attention can profitably be given to turning the raw edges outward instead of permitting them to fall inward as the peritoneum is sutured. A mattress or similar type of stitch can be used to evert these peritoneal edges, but we usually use the ordinary continuous whipover suture using the thumb forceps in everting the edges as the suture line is drawn taut.

Sponging and Packing. Contrary to popular belief sponging and packing if properly carried out do not appear to cause adhesions. If a pack intertwined about loops of gut is forcibly pulled out in such a way as to tear the serosa of the gut this will, of course, cause adhesions; but this injudicious act is rarely committed by surgeons. It does appear, however, that bacteria dragged in from the abdominal wall onto the surface of the gut by packs or sponges may cause adhesions. Consequently it is of some importance to keep drapes properly arranged at all times so that the skin of the abdominal wall is entirely protected, thereby preventing packs and sponges from dragging bacteria from the skin onto the gut. It is well known that our available antiseptics will not completely sterilize the skin of the abdomen.

Knots, Raw Surface and the Noble Plication

All surgeons are aware that for years it has been considered good practice to bury knots wherever feasible. Only one who has had the opportunity to do experimental work, however, is likely to be as conscious of the definite consistency with which adhesions do attach themselves to knots. Wherever a knot is left exposed, gut, omentum or an adhesion strand, will attach at that site, and remain permanently in almost 100% of the cases. Wherever possible a suture

should be started and ended in such way that knots fall under the surface of the peritoneum.

The **Noble plication** is occasionally a valuable procedure. This plication method, originated by Noble, simply consists of folding a loop of bowel on itself and suturing the surfaces of the folded loop together so that any raw surface on one or both parts of the loop is covered by the approximation of the loop to itself. In other words, a loop is arranged in U fashion and the two prongs of the U sewed to each other. This, of course, in a sense is a creation of an adhesion; but the procedure leaves a clean serosal covered surface which is much better than leaving a large raw surface on the gut to fall where it may and possibly produce obstruction.

When one does the Noble plication it is necessary to start suture at the base of the mesentery of the loop and suture upward to the bowel, continuing the suture on up the bowel loop in such way as to prevent leaving any pocket in the folded mesentery or bowel, else an obstruction might form from other loops becoming impacted into such a pocket.

The question might arise as to whether the sharp turn at the base of the U loop might interfere with function after the surface of the gut (the two prongs of the U) have been sutured together. Suffice it to say that there is no interference with physiologic function or danger of obstruction at the sharp turn unless one infringes upon the gut much more than is necessary for complete approximation of the loop.

The Noble plication is to be used only when the raw surface cannot be covered by some easier and more efficient method.

Subserosal removal of the gall bladder so that the serous coat can be used to cover the raw bed; and the use of detached patches of omentum to cover raw surfaces such as that following some colon resection where insufficient peritoneum remains for closure of the pelvic floor, are additional examples of legitimate attempts at avoiding raw surface with which you are familiar.

Suture Materials

Very little will be said in this presentation about suture materials since Dr. Wharton is giving a paper on this subject. We will mention that in the course of many experiments in which, the effects of suture materials have been observed, the general current opinion as found in the latest literature regarding suture materials seems correct. The following conclusions regarding suture materials seem warranted.

Catgut. Plain catgut as it is manufactured today is about the poorest of all sutures, even in closure of the peritoneum. When catgut is used in the abdomen the finest chromicized catgut which is sufficiently strong to withstand the tension upon it, should be used. This means usually anywhere from the new 5-0 gut to chromic No. 1. Rarely indeed is anything stronger than a 00 Chromic needed for closing of the peritoneum, and there is hardly ever any occasion for the use of chromic No. 2 in the peritoneal cavity.

It is to be remembered that the chemicals used to impregnate, chromicize and tan catgut are in themselves irritating. Too, every manufacturer does not use the same methods of chromicizing catgut. We prefer Davis and Geck brand. When proper sizes are used this brand of catgut (exclusive of the knots) does not create adhesions extensively, and we have found it uniformly strong and dependable.

Silk. There has been a great swing in some quarters towards the use of silk in the peritoneal cavity. The increased use of silk seems to be warranted at least to some extent. Ochsner, Whipple and many others use it throughout in all types of abdominal operations believing that it is much less irritating, more dependable and less prone to cause adhesions than chromicized catgut. It is erroneous to say that silk is not absorbed in the peritoneal cavity. It is absorbed very slowly; but in the course of a few months a fine untreated silk suture will have disappeared.

Caution should be used to avoid using unduly heavy silk in the abdominal wall or cavity, and the creation of a great many knots may cause sinus formation to the outside. Ochsner has warned against using silk except, generally speaking, as an interrupted suture. We are inclined to disagree somewhat with this excellent surgeon on this particular point. We believe that rather short continuous strands of fine silk may be better in most instances than the creation of too many knots.

We would sound definite warning regarding the improper selection of silk suture materials. Just as some manufacturers are using different methods of preparing catgut, there are some who use different methods of preparing silk. For example, the Deknatel silk has been highly advertised as a specially prepared "super" suture material. We have found it a very poor material, however, for usage in the abdominal cavity. The manufacturers apparently permeate their silk with some oils or paraffin, or some other substances which definitely tend to create adhesion

formation, even more than Davis and Geck Chromic catgut.

Untreated black silk (the type one buys at the ten-cent store) is excellent for burying the appendix stump for example except that it will not stand repeated sterilization.

Cotton. Gage believes that ordinary fine cotton thread which one may buy at the ten-cent store is a good suture material for use in the peritoneal cavity, and his observations have been upheld by Ochsner and some other workers. The cotton, as silk, is slowly absorbed.

Postoperative Distention

Postoperative distention, as said above, is an important factor in tearing the peritoneum along the suture line and thereby causing adhesions. The problem of postoperative distention cannot be discussed in detail here, but one point regarding it will be made. Ochsner feels that the frequent and promiscuous use of postoperative enemas is a pernicious practice which predisposes to distention. We believe not only that enemas are used too promiscuously postoperatively, but preoperatively as well. Enemas empty only the lower bowel. They stimulate the sympathetic reflexes to the small bowel, thereby predisposing to distention of the small gut. Thus irritating substances as well as air are frequently left within the colon following the enema.

Enemas are too frequently used because so many of us attempt to achieve the ill-conceived romantic dream of ridding the body completely of fecal material. Obviously some fecal material is present in the gut at all times from a few days after birth until death. And according to one of the greatest physiologists who ever lived, namely Hewlett, indol, skatol and other by-products of fecal material assist in maintaining proper tone of the gut. Of course, undue constipation may be the cause of some toxic absorption. But in routine surgery we rarely give an enema preoperatively or postoperatively unless it is a very small one to assist in starting a movement which has already accumulated in the rectum. Since adopting this routine several years ago we feel that we have noticed a very definite decrease in our incidence of postoperative distention. We do not recommend the complete abandonment of enemas because we use them still in some cases, and we are fully aware that many of you will not agree with the above assertions.

Dehydration

Dehydration of the bowel may predispose to ward loops of gut sticking together and to adhesion formation. Therefore, for this reason, as

well as others, of course, it is important to maintain a satisfactory fluid balance postoperatively. When the gut has been too dried out during the operation it is then that some isotonic saline left in the cavity may be of some benefit.

Should One Bury the Appendix Stump?

Our experimental efforts indicate that one should bury the appendix stump unless its inaccessibility or inflamed serosa about the appendix base which will not hold suture material properly, or inexperience of the operator combined with the two difficulties just mentioned, exist. This, of course, is still a live subject and the Horsleys, the late Mayos and others of prominence have strongly advocated the simple ligation and drop method as being superior. The author used the ligation and drop method for eight or nine years before becoming convinced the advocates of the inversion technique were correct in their assumptions. We say this, being quite familiar with the arguments used on both sides, discussion of which cannot be pursued here. We prefer ordinary untreated black silk such as one buys at the ten-cent store, for the inversion suture. Our next preference is fine chromic catgut as double or triple 0, or linen. We would warn against the use of the present Deknatel silk for burying the stump since adhesions are more prone to form about this latter suture than any of the others just mentioned.

NOTE: Since this paper was completed Lehman and Boys report experimental studies with Heparin as an adhesion preventive. These men used the author's method of adhesion production for their studies. Heparin is an anti-coagulant and Lehman and Boys believed it might prevent the laying down of the fibrin in exudate. They reported excellent results, and though they were sufficiently conservative to advocate additional work before final conclusions are reached, their results hold much interest.

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A BRIEF COMPARISON OF VARIOUS SUTURE MATERIALS*

JOE B. WHARTON, JR., M. D.

El Dorado

Well realizing the controversial nature of this subject, and the fact that there is so great a personal preference amongst surgeons for the various types of suture materials, it is not my purpose to unduly criticize or praise any one type of material, but to try to evaluate the proven efficacy of each type of suture.

Primarily, what are the essential requirements for good suture material? First, the reaction of tissues to it; second, its tensile strength; third, the life of its strength; and fourth, and least important, its cost.

Every different type of suture creates an equally different tissue reaction, primarily. Sutures that cause almost invariably exudation of serum are rapidly, but not rapidly enough, being abandoned. The allergic response of some individuals to sutures has long been a debatable question; however, it has been definitely proven in some subjects that they are allergic, particularly in a second operation where the same suture as was used previously was employed again. I shall attempt to point out later the exact response of tissues to each type of suture.

The initial tensile strength, that is, the strength of the suture for the first three or four days following operation is important only in those cases in which distention, infection, or strain due to coughing, vomiting and such occurs.

The life of the strength of a suture is of great importance in every single suture utilized, and is determined by the original type of material, its loss of strength in sterilizing and its absorbability.

We shall take for granted that all types of sutures are to be thoroughly sterilized, and we shall at this time not delve into the costs as a criticism or asset to materials for sutures.

Catgut has been longer and probably more universally used than any other one type of suture material. I should like to preface my remarks on it by citing the remarks of Halsted in 1913. I quote "The relatively high cost of catgut, its bulkiness, the inconveniences attending its use and sterilization, its inadequacy, the uncertainty as to the time required for its absorption, and the reaction which it excites in a wound, induced me to discard it completely for clean wounds in the surgery both of the human subject and of animals. With the fine silk in our wounds, which

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for twenty-three years have, as a rule, been closed without drainage, suppuration almost never occurs. But catgut, even that which we have no cause to believe is not sterile, irritates the wound for some reason, perhaps because it serves as culture medium for saprophytic organisms which are carried into it from the deep epithelium and follicles of the skin. It should be borne in mind that during the greater part of the period of its disintegration the catgut suture is not only not serving its purpose but is playing the role of necrotic tissue, of a culture medium. It is well within reason to expect that the technic may be at least so perfect when silk is employed that the wound will become infected not once in a hundred cases." Catgut has the advantage of absorbability but in this quality there is a wide variation as to the rate and time of absorption. Because of its relatively rapid absorption, many surgeons have resorted to using large sizes of chromic catgut on large needles and taking large bites of tissue, and to complete this utterly unphysiological act, tie these sutures under great tension. This leads to only one thing, necrosis of the strangulated tissue with resulting more rapid digestion and destruction of the suture material and consequently wound disruption with evisceration or wound infection and subsequent herniation.

Catgut also has the unhappy property of being a better culture media for the growth of microorganisms. This is true particularly in the larger chromicized catgut and in plain catgut. This brings out a point of great importance that has been proven by Bower, Burns and Mengle of Philadelphia, Robert R. Bates of Joliet, Illinois, and Wolff and Priestley of the Mayo Clinic; that is, the great superiority of very fine chromicized catgut over heavy chromic and all plain catgut. To briefly summarize their findings: (1) small sizes of catgut last as long or longer than large sizes, (2) single strands of catgut last longer than double strands, (3) labels which indicate the length of time necessary for absorption of catgut are entirely fallacious in so far as the human being is concerned, (4) variation among individuals in the absorption of catgut is great, (5) certain brands of catgut consistently last longer than other brands, (6) plain catgut excites a prompt, violent exudative foreign body reaction, which delays the appearance of fibroblasts and so delays wound healing.

Silk

Recent clinical and experimental studies on silk seem to bear out postulates set out by Halsted for suture materials. Of course, one, if he

expects to get results from the use of silk, must follow this technic carefully: use of the finest grades of silk, all sutures interrupted, careful hemostasis and a constant effort to tie sutures without tissue tension.

Shambaugh and Dunphy demonstrated in dogs that wounds repaired with silk tolerate bacterial contamination better than similar wounds repaired with catgut. Meleny supports the following superiorities of silk over catgut: (1) Hemostasis is better, for the silk knots do not become untied as do catgut knots, (2) the cellular and fluid reaction about silk is minimal while about catgut it is maximal, (3) the use of silk automatically requires a surgeon to be more gentle with the tissues. Allen O. Whipple concludes his remarks on the comparison of catgut and silk by saying, "Since silk has been adopted by the men trained in its use in our clinic, the improvement in our wound healing has been so striking as to leave no room for argument as to both immediate and late results."

Cotton

Spool cotton, as a suture material, has been used extensively by Ochsner and his fellow-workers, and they have found that it produces less cellular reaction and earlier healing than catgut, silk or linen. Even though cotton has less tensile strength for its size than any of these other three, it showed after being placed in tissues much less decrease in its tensile strength than the others. It is to be remembered that there is no need of using a suture material that has more than twice the tensile strength of the tissue into which it is to be placed. These investigators also showed that there is practically no tissue ingrowth in cotton sutures in contrast to silk, this phenomenon occasionally resulting in a so-called silk suture sinus.

Another asset for cotton as a suture lies in the fact that when boiled for twenty minutes it increases its tensile strength by ten per cent, whereas there is no change in silk. When placed in tissues, it loses ten per cent of its tensile strength in fourteen days, while silk loses thirty-five and catgut fifty to seventy per cent. In 196 major operative procedures where cotton was used, 191 wounds healed by primary intention. The technic as in silk must be followed closely when cotton is employed. To reiterate: (1) use only interrupted sutures, (2) never use coarse suture material, (3) never bridge over a dead space as a chord subtends an arc, (4) use transfixion sutures in ligation, as finer materials may be used in this way, (5) avoid the combined

use of buried absorbable and non-absorbable sutures.

Wire

The use of steel wire as suture material has been begun again with renewed interest in certain localities. Dambrin reports excellent results after thirty-two years experience with it. He closes the abdominal wound with two layers, the deeper one comprises steel wire through the peritoneum and muscular aponeurosis, and the upper cutaneous one with steel clips. Ferguson has been using wire sutures in herniae for four years. He reports that reaction from the wire in the tissue is less than with catgut or silk. In 142 cases of inguinal herniae he has had five recurrences.

Fascia

Living fascia as a suture material has many justified followers, particularly in the repair of herniae. Its use is indicated especially in those individuals whose hernia is a result of an extremely weakened floor of the inguinal canal and in those having unusually large herniae.

Conclusions

1. The efficiency of any suture material is enhanced by its conforming closely to the essentials of little tissue reaction, tensile strength, both initial and durable, and low cost.
2. Catgut has been found to be superior in smaller sizes (0-00000) in lower tissue reaction, slower absorbability and increased tensile strength.
3. Plain catgut has relatively little use in surgery today.
4. Surgeons who use silk must rely on the accepted technic of using all interrupted sutures, using fine suture material cutting close to knots, having little tension on sutures and assuring perfect hemostasis.
5. The same rules must be followed in utilizing cotton sutures.
6. Cotton is superior to silk in the durability of its tensile strength and lack of tissue ingrowth.
7. Steel wire has a few followers in suturing abdominal wounds, particularly hernia.
8. Living fascial sutures in repair of large herniae have many justified followers.

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HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith, and A. S. Buchanan.

Conditions after the War were such as to paralyze every form of economic activity. Surgeons returned from their army appointments after surrender to find localities in which they had practiced suffering from poverty, confusion and despair.

In 1866, one year after the termination of the War, the College of Physicians and Surgeons was organized in Little Rock and kept up an active existence until we find its name changed to the Little Rock and Pulaski County Medical Society in 1872. This name has been used by the county organization ever since.

The first attempt to organize a state medical society in Arkansas took place November 21, 1870. Pursuant to a call made to the profession of the state, delegates from various county medical societies met in Little Rock. Dr. J. M. Holcombe, of Jefferson county, was elected temporary chairman; and Drs. E. V. Deuell and M. C. Boyce, temporary secretaries. The following delegates were present: Sebastian county, Drs. E. R. DuVal and J. C. Feild; Hempstead county, Drs. E. C. Cross and M. C. Boyce; Drew county, Dr. J. A. Owens and W. H. Barry; Jefferson county, Drs. J. M. Holcombe and S. W. Jones; Ashley county, Dr. J. N. Owens; Pulaski county, Drs. M. K. Starke and J. B. Bond. Committees were organized for the purpose of forming a permanent organization. Dr. P. O. Hooper, president of the Pulaski County Medical Society, delivered the opening address. Dr. M. K. Starke was elected president of the temporary organization. Recording secretaries were Drs. E. V. Deuell, of Pulaski county, and J. C. Feild, of Sebastian county; corresponding secretary was Dr. Claibourne Watkins, of Pulaski county, and Dr. J. B. Bond, of

Pulaski county, was elected treasurer. Dr. P. O. Hooper was elected president of the permanent organization and the temporary secretaries and treasurer were made permanent.

Committees were appointed for the permanent organization for the purpose of preparing a constitution and by-laws. This constitution and by-laws virtually stated that the name and style of this association shall be "Medical Association of the State of Arkansas. Then followed the constitution and by-laws, which were necessary for the life and continuance of this first state medical society.

A dinner was given, at which Dr. Dungan presented to the association some Catawba wine of his own manufacture, which upon testing was voted to be very superior. A sample of medicinal whiskey, presented by Dr. Beidelman, was found to be all that he claimed for it. Under the influence of these inspirations, a number of toasts were responded to and the meeting adjourned.

The next session of the State Medical Association was held in Little Rock, November 5 and 6, 1871. The meeting was called to order by Dr. P. O. Hooper, president. He made a most interesting and eloquent address which was appreciated by the members of the medical profession.

The following officers were elected in 1872: President, Dr. J. M. Holcombe, of Pine Bluff; Secretary, Dr. E. V. Deuell and Dr. E. C. Cross; Corresponding Secretary, Dr. Claibourne Watkins; and J. B. Bond, Treasurer.

Dr. L. Augspath, of Little Rock, established a new and ingenious dental splint. The committee on necrology reported the death of Dr. James H. Hazzard and Dr. R. B. Harper. There were a number of scientific papers read and the society, yielding to necessity, increased the dues to \$4.00 a year, which must be paid in a reasonable time or the members would be dropped from the list. Dr. R. G. Jennings made an interesting report of the climatic diseases of Little Rock, namely, malarial hematuria.

The State Medical Association met the following year, 1873, again in Little Rock. At this time the serpent entered the State Medical Association in the guise of a quarrel between the doctors of Hot Springs. From that time on conditions prevailed that meant the death of the organization. Dr. G. W. Lawrence, of Hot Springs, and Dr. Almon Brooks, preferred charges against each other, after which the doctors in Hot Springs arranged themselves on opposing sides. The discord that occurred was transferred to the

EDITORIAL NOTE: This is the second installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

State Medical Society with the result that after two more years of strife it was found that all of the time of the members was taken up with the quarrels of these physicians in Hot Springs.

This is not the place to discuss the merits of the various charges of the physicians against each other, but as a matter of self-preservation it was found necessary to organize a new state society, which was done by addressing a circular letter to all the physicians in Arkansas with the result that one was organized in 1875 at Little Rock. Upon a call signed by 222 physicians of Arkansas, it is a matter of history that from that time to this the element of discord that disappointed the first state society has been absent from the last and present one. Physicians of Hot Springs who had been most active in quarrels were denied admission to the new society and from that time on their troubles were a thing of the past.

During the closing years of the first medical society they again met in their fourth annual session on October 9, 1873, in Little Rock. Dr. D. A. Linthicum, president of the association, was in the chair. At the close of the meeting Dr. DuVal, of Ft. Smith, was elected president for the ensuing year.

It is interesting to note that in this year the first mention was made of a medical school in Arkansas. Suggestion was made to the state society that a medical department should be established at St. John's College, then in existence, near the present medical school in Little Rock. No action, however, was taken upon the suggestion. A great deal of the meeting was taken up with the quarrels of Hot Springs, reports of various investigating committees, affidavits of friends of the accused, on which it is not necessary to expend our time.

The next meeting was held in Little Rock, October 20, 1874, with President E. R. DuVal, of Ft. Smith, in the chair. There were a number of interesting papers read and at the close of the meeting Dr. Wm. B. Welch, of Washington county, was elected president for the ensuing year. It is interesting to note that attempts were made at this time to make use of vital statistics. Dr. R. G. Jennings made a report for Pulaski county and Little Rock. He reported in Little Rock a case of syphilis and two of scrofula.

The sixth annual session of State Medical Association was held in Little Rock, November 1, 1875. The president, Dr. W. B. Welch, being absent, Dr. William Thompson, first vice-president, was in the chair. Resolutions were passed concerning the new medical society organized in the state and a committee was recommended

to interrogate and visit and reason with these erring brethren and bring them back into the fold. I regret to say that nothing of this kind was accomplished, that all of the resolutions and good intentions went to naught. Dr. Wm. H. Barry, of Garland county, was elected president for 1875-6; and with this last meeting the organization known as the Medical Association of the State of Arkansas ceased to exist and its place was taken by our present society. The present society was organized October 12, 1875, in the U. S. Circuit Court Room in Little Rock at 9:00 o'clock, with a large number of delegates present. The meeting was called to order by Dr. H. P. Crute, of Chicot county. Dr. Crute stated that the call contained the signatures of 222 physicians and the authority that they should organize the new medical society. Dr. P. O. Hooper moved that the chair appoint a committee of three on credentials. Dr. R. G. Jennings moved that they appoint a committee of five on permanent organization.

The committee on permanent organization reported that the name of the new society should be known as the State Medical Society of Arkansas in place of the Medical Society of the State of Arkansas. New constitution and by-laws were adopted and Dr. W. B. Welch, of Washington county, was elected president for the ensuing year, having the distinction of being president of the disappearing and appearing societies for the same year, a distinction that does not come often.

The committee on address to the medical profession of Arkansas stated that they declined to dig up the past and that the gods help those who help themselves. They proposed to go forward in this new organization with nothing but good will toward each other.

Dr. Wm. B. Welch, president, reported a case of suppurative pericarditis with operation by aspiration, which was successfully done, something that should be made a matter of permanent record in the archives of medicine in Arkansas.

Dr. T. E. Murrell reported a case of acute suppurative of middle ear, the first report by any specialist in Arkansas.

Dr. J. Gilbert Eberle, of Ft. Smith, reported a case of hemorrhagic malarial fever, the beginning of a subject that engrossed the state medical society for many years.

On the 11th day of October, 1875, the charter of the State Medical Society of Arkansas was obtained in Little Rock by Drs. P. O. Hooper,

James H. Lenow, A. L. Breysacher, J. A. Stinson, D. A. Linthicum, R. G. Jennings and two hundred others. It is presumed that this is the one that the society is acting under at the present time.*

The next meeting in 1876 of the State Medical Society of Arkansas was held in Hot Springs, the first time that the society had met outside of Little Rock. The meeting took place on the 12th day of October, 1876.

The society convened at St. Luke's Church, Hot Springs, May 1, 1877. Dr. A. N. Carrigan, of Hempstead county, was elected president.

Dr. A. A. Horner, of Helena, was elected president for the year 1878.

There appears at this time, as assistant secretary, the name of Dr. L. P. Gibson, of Little Rock. It is interesting to note that at the time he began his activities in organized medicine in Arkansas, which continued actively until his election as president of the society in 1895. During all these years he edited the journal of the State Medical Society with a virile and energetic pen. The writer can think of no man whose work in the State Medical Society has been more helpful than that of Dr. Gibson.

The third annual session of the new State Medical Society, Dr. A. A. Horner, Helena, President, was held May 1, 1878, in Adelaide Hall in the city of Ft. Smith. There was an address by Mayor Brizzolara and by Dr. J. H. T. Main. The president's address elicited a very generous response on the part of the members present. The meeting seems to have been a very interesting one and most successful.

The next meeting was held in Little Rock, Dr. E. T. Dale, of Texarkana, being elected president. Here appears for the first time the name of Dr. Edwin Bentley, who was then surgeon at the army post in Little Rock. By reason of his presence there he was affiliated with the State Medical Society as an honorary member. It is interesting to note that from this time on Dr. Bentley became a conspicuous and famous figure in the medical history of our state.

Resolutions of regret were adopted over the death of Dr. Edward Tandy Easley, of Little Rock. In the summer of 1878 yellow fever became prevalent in the Mississippi valley, centering chiefly in the vicinity of Little Rock and Memphis, where thousands of cases died from yellow fever. There was an outbreak in Forrest City and one in Pulaski county without any spread of

disease from those localities. There was an outbreak in Helena of considerable magnitude. Dr. Easley volunteered his services at Memphis and died on September 30, 1878. There was no more pathetic and brave instance of unselfish devotion in the history of Arkansas medicine than that of Dr. Easley, who gave his life for the yellow fever sufferers in Memphis. Resolutions of regret and condolence were passed by the state organization.

For the first time a State Board of Health was organized by the State Medical Society with local branches in various counties, particularly in the eastern part of the state. Quarantines were established, passengers inspected on the trains, and anyone coming from a locality known to have yellow fever was rigidly excluded. There is no indication that the state government itself took any part in this first State Board of Health. In fact, a committee from the State Medical Society stated that an attempt had been made in the recent Legislature to establish a State Board of Health, but at the time the bill for its organization had been allowed to slumber and die in committee. There is no record but it is very likely that this is what was done.

Yellow fever disappeared with the frost as it had always been known to do. The case occurring in Little Rock was a negro preacher returning from Tennessee through Memphis, whose illness led him to go to an isolated cabin on Fourche Mountain. There he died. It is very probable that this occurrence saved the outbreak of yellow fever in Little Rock. The high location and absence of mosquitoes prevented the spread of the disease.

The next annual session of the State Medical Society of Arkansas was held in the City of Little Rock at the Hall of Representatives in the State House, at 10:00 a. m., on May 5, 1880, and was called to order by the president, Dr. E. T. Dale, of Texarkana.

On August 5, 1879, occurred the following proclamation of interest to the profession of the state:

"WHEREAS, the State Medical Society of Arkansas at its recent session, caused the appointment of certain members of that body to represent, in the absence of statutory organization for the purpose, a State Board of Health;

"Now, therefore, I, William R. Miller, Governor of Arkansas, do hereby make proclamation that, with a view to secure the public safety, I have called upon the Board of Health aforesaid to take such action as may be proper to protect the public against epidemic diseases, and henceforth the said board will be recognized by the Executive Department of the State government and supported and maintained as such to the full extent of the

EDITORIAL NOTE: The Society now operates under a charter issued by the Circuit Court of Pulaski County dated October 11, 1929.

power in me vested; and I ask all local boards of health to cooperate with said State Board in all matters touching the rules, regulations and enforcement of a uniform and thorough system of quarantine. As no appropriation exists by virtue of which the necessary expenses of the operations of said board can be paid from the treasury of the State, I do hereby call upon the good citizens of the State, and upon its organized municipalities, for such generous donations to the said board as may enable it efficiently to discharge its functions in the public interests.

"In testimony whereof, I have hereunto set my hand and affixed the seal of the State of Arkansas.

"Done at Little Rock this 5th day of August, 1879.

"By the Governor: (Signed) W. R. Miller.

"Jacob Frolich, Secretary of State."

As a result of this proclamation Arkansas had its first official State Board of Health created at that time.

The Legislature of 1881 adopted two important measures that affected the history of the medical profession in the State of Arkansas. Taking advantage of the terror that followed the invasion of Arkansas by yellow fever, the Medical Society of the State succeeded in getting a law passed by the Legislature of 1881 establishing a State Board of Health, composed of the following. Dr. C. E. Nash, of Helena; Dr. C. P. Smith, of Arkansas City; Dr. J. B. Cummings, of Forrest City; Dr. R. G. Jennings, Dr. J. A. Dibrell, Jr., and Dr. A. L. Breysacher. These gentlemen were appointed by Governor Churchill, being recommended to him by the State Medical Society, and this was really the first board of health legally constituted in Arkansas. Appropriation was made by the Legislature to enable the board to function for two years. At that time owing to the indifference of the Legislature to public health, the menace of yellow fever not being present, the Legislature neglected to make any appropriation so the board functioned in name only. For the first two years they contributed excellent service to the state. The law was modeled after the New York State Board of Health Law and was an excellent piece of legislation.

There were also established boards of examinations to license physicians in the State of Arkansas. This was the first attempt made since the territorial law passed during the governorship of John Pope in territorial days, which was promptly vetoed by Governor Pope. The law passed by the Legislature of 1881 to regulate the practice of medicine was a vicious one and was not the one requested by the medical profession of the state. It established county boards of examiners, made no requirements as to the right of physicians to be examined, such as requiring a diploma from a recognized medical school. In

fact, there was no provision in the law to require an applicant to show that he had ever studied medicine. His qualifications were a matter to be determined only by county boards. There was also provided a state board which would act as a court of appeals in case men were not granted licenses by examination through the county boards. This board was practically a dead letter and had nothing to do, owing to the fact that practically nobody failed before the county board. This law was in existence when the writer came to Arkansas and proved to be a stumbling block and a reproach to medicine in this state. Repeated efforts were made afterwards by the State Medical Society to repeal or amend the law for many years without any degree of success.

The 7th annual session of the State Medical Society met in Little Rock May 31, 1882, in the House of Representatives. Dr. R. G. Jennings, of Little Rock, was president. It is well to note the report of the delegates to the American Medical Association to the Arkansas Medical Society. Their reports stated that Arkansas would be signally honored by the fact that Dr. P. O. Hooper will act as president of the A. M. A. at the meeting which convenes in St. Paul, Minnesota, June 6, 1882. This is the first and only time that such honor has been accorded to a physician from Arkansas. Dr. Hooper had been elected vice-president and Dr. J. J. Woodard president. Owing to the illness of Dr. Woodard and his absence from the United States, being ill in Europe, Dr. Hooper served as president of the A. M. A.

There was also made a report by Dr. J. H. Southall, chairman of the committee on legislation, regarding the type of bill enacted by the last Arkansas Legislature and recommended that efforts be made to amend or repeal the bill.

It is to be noted that at this meeting there were several papers relating to the discovery of the malaria plasmodium and was the work of Krebs and Thomasi-Crudeli. For the first time the scourge of Arkansas, malaria, was to be treated from a scientific standpoint.

The 8th annual session of the Arkansas Medical Society met May 30 and 31, 1883, in Little Rock in the Hall of Representatives. The president was Dr. James H. Southall. Reports were made from the committee on medical legislation, stating that an effort had been made to pass another bill in place of the existing law of 1881. This bill provided for one medical examining board to consist of 5 members, one from each Congressional district which would meet

twice a year. This bill was quietly put to death in the Senate and the House of Representatives. The failure of the committee on medical legislation seemed to stimulate them to continued work. At this session acting under a resolution entitling each state society to confer an honorary degree of M. D. upon some distinguished member, the honor was conferred upon Dr. James McDonald Keller, of Hot Springs.

The proceedings of the Arkansas Medical Society beginning with the meeting of 1890 resulted in the establishment of a state journal to publish the proceedings of the society, its scientific papers, and also to act as a news medium of the profession of the state. The secretary, Dr. L. P. Gibson, was made the editor and manager of this journal. It continued to be in existence until 1897 when the journal was abolished and the publication of a bulletin was substituted in its place. This procedure did not prove to be satisfactory and later on The Journal was again established.

The 9th annual session the State Medical Society of Arkansas was held in Little Rock April 30 and May 1 and 2, 1884, the president being Dr. J. M. Keller, of Hot Springs. A new medical law was formulated and its adoption urged by the State Medical Association. Dr. Southall was continued as chairman of the committee on medical legislation.

The 10th annual session the Arkansas Medical Society met in the Hall of Representatives in Little Rock April 22 and 23, 1885, the president being Dr. T. W. Hurley, of Bentonville. There had been since the organization of the State Medical Association two sets of delegates from Pulaski county, one from the Little Rock and Pulaski County Medical Society. The College of Physicians and Surgeons had 24 members; Little Rock and Pulaski county had 14. The writer has never been able to find any reason why there should have been two medical societies in Pulaski county existing side by side and each having representatives in the State Medical Society. This year, Dr. Gibson, the secretary, succeeded in getting tabulated reports from counties in the state for medical legislation and for the first time to stimulate an effort to harmonize the different medical groups in the state in order that there might be concerted action in reference to medical legislation.

The 11th annual session of the State Medical Society of Arkansas was held again in Little Rock, April 28 and 29, 1886, the president being Dr. W. H. Hawkins, of Texarkana. At this time there had been established by the state an insane

asylum, the result of the efforts of the State Medical Association. Dr. P. O. Hooper was appointed superintendent.

The 12th annual session of the Arkansas Medical Society met in Little Rock in the Senate Chamber June 1, 2 and 3, 1887, with Dr. James A. Dibrell, Sr., of Van Buren, as president. Drs. W. P. Hart, D. C. Ewing, W. H. Hawkins (Drs. D. E. Byrd and D. A. Linthicum not being present) composed the committee on medical legislation who formulated the following bill for the establishment of a State General Hospital in Little Rock for the action of the next Legislature. So far as I know, this is the first attempt made to establish a State General Hospital in Arkansas.

"SECTION 1. Be it enacted by the General Assembly of Arkansas, That there shall be established at the City of Little Rock in connection with the Medical Department of the Arkansas Industrial University a hospital to be known as the Arkansas State Hospital to be general in its character and to be maintained at the expense of the State.

"SECTION 2. For the purpose of erecting and equipping said hospital the sum of \$30,000.00 be and the same is hereby appropriated and for the maintenance the sum of \$10,000.00 be appropriated for each year of the next two fiscal years.

"SECTION 3. That said hospital shall be under the control of a Board of Trustees consisting of five persons to be appointed by the Governor with and by the advice and consent of the Senate, no two of whom shall be residents of the same congressional district, and at least three of whom shall be reputable practicing physicians, and in the advent of a vacancy either by death or resignation during the vacation of the Legislature, the same shall be filled by appointment of the Governor."

An attempt was made by the committee to pass this piece of legislation at a subsequent meeting of the Legislature, with failure as a result. I regret to say that there was opposition to this from certain members of the medical profession who should have been its friends.

The 13th annual session of the State Medical Society of Arkansas was held in Ft. Smith April 25, 26 and 27, 1888, the president being Dr. W. P. Hart. The following bill was recommended by the State Medical Society for enactment by the Legislature:

"Resolved, That the present medical law of the State of Arkansas be so amended that there shall be a Medical Examining Board for each Congressional district, consisting of five physicians or surgeons residing in the district. Three of the members of each of these Boards shall be nominated by the Governor and confirmed by the Senate, out of six names, residents of the Congressional district, furnished to the Governor by the State Medical Society and who shall be practitioners of at least five years, standing in the State. The other two members of each Board shall be nominated by the Senate as in the case of the three names furnished by the State Medical Society. The members of said boards shall hold office for four years, when a re-appointment shall be made.

"Resolved, That a State Board, who shall only have power to examine applicants who may have failed before one of the District Boards, shall be appointed in the same manner as the District Boards, three members of which State Board shall be residents at or near the City of Little Rock."

This bill unfortunately failed as had all its predecessors in an attempt to amend the medical act of 1881.

It is to be noted in the scientific papers published in The Journal and read at this meeting several concerned the new drug acetanilide and its recommendations and treatment for all febrile and certain nervous disorders. There was noted much enthusiasm concerning this new drug.

The 14th annual session of the Arkansas Medical Society was held in Pine Bluff May 28, 29 and 30, 1889, Dr. Edwin Bentley being president. The committee on medical legislation reported failure of an effort made to have its recommendations enacted by the last Legislature. Reference of the bill to the committees of the House and Senate resulted in a report from the committees that the bill do not pass and it did not. The usual number of scientific papers were read and the society adjourned after electing Dr. Z. Orto, of Pine Bluff, president, and selecting Little Rock as the next place of meeting.

The 15th annual session of the State Medical Society of Arkansas was held in Little Rock May 14, 15 and 16, 1890, the president being Dr. Zaphney Orto, of Pine Bluff. In his annual address he strongly urged the establishment of a monthly journal. His recommendations were referred to a committee, who heartily concurred in the suggestion with regard to the establishment of a journal as an organ of this society and further suggested in carrying out this idea the appointment of a committee of five on medical journal. The report of the committee was adopted and they resolved to establish a journal to be conducted on the same general plan as the Journal of the American Medical Association, and that a committee of three be appointed to formulate details and plans for properly conducting this journal. The committee was instructed to report the following day. The report was adopted and the following trustees appointed to manage the journal: Dr. P. O. Hooper, Dr. James H. Southall, Dr. J. A. Dibrell, Jr.; Dr. Zaphney Orto, of Pine Bluff; and Dr. W. B. Lawrence, of Batesville. Dr. Lorenzo P. Gibson was appointed editor and manager of the journal. This was the first attempt made by the State Medical Society to publish its proceedings in journal form, and this journal was continued until 1897. Its publication was then discontinued

and a bulletin published for nearly two years, after which this practice was discontinued. This journal may be regarded as the first medical publication in Arkansas with the exception that during the year 1880 the Arkansas Medical Monthly was edited and published by one Dr. Jonathan J. Jones. Twelve publications of this journal are all that have been found. It is possible that this journal died in a natural manner for lack of support. During its existence it made an attack upon the medical school and suffered financially thereby. Dr. Jones disappeared from the history of medicine in this state and what became of him is not known.

(To be Continued)

THE NEW ORLEANS GRADUATE MEDICAL ASSEMBLY

The growth of the New Orleans Graduate Medical Assembly has been truly spectacular. Starting in a small way four years ago it has increased its attendance by leaps and bounds, and it has apparently appealed to a very large number of men, not only throughout the South but also from the North and Midwest. This is a very practical demonstration that the medical man is anxious and eager to keep up with the advances in medicine and to review the latest and most outstanding features in his professional field.

The meeting which will be held March 3-7, 1941, should be the largest one that has ever been conducted. This is said advisedly because the list of guest speakers is outstanding and the character of the presentations that these speakers will make is guaranteed by their professional reputation. It would be impossible to enumerate here the names of the eighteen outstanding essayists. Men like Paul D. White, Paul A. O'Leary, Owen H. Wangensteen, Ernest E. Irons, Maurice C. Pincoffs, Charles F. McKhann and Cecil S. O'Brien are known not only locally but nationally. Only a few of the guest speakers have been mentioned but the others are equally known and prominent in medical circles.

The thinking medical man will realize and appreciate that this medical assembly will give him an excellent opportunity to find out about the advances in medicine and surgery; it will give the hard working professional man an opportunity to relax from the daily grind, and it will give the doctor whose contact with other members of his profession is limited an opportunity of talking over his problems with his fellow practitioner and with men who are known as teachers and scientists.

The registration fee of \$10.00 includes not only the lectures, and clinics in the hospitals of New Orleans on March 7, but also the daily roundtable luncheons, the smoker, the exhibits and many other features.

COMING MEDICAL MEETINGS

Mid-South Post Graduate Medical Assembly, Memphis, February 11-14, 1941.

New Orleans Graduate Medical Assembly, New Orleans, March 3rd-6th, 1941.

Arkansas Medical Society, Little Rock, April 14-16th, 1941.

American Medical Association, Cleveland, June 2-6th, 1941.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

OLIVER WENDELL HOLMES admonished his medical colleagues to put themselves in the patient's shoes for that would make them more considerate and sympathetic. A physician, who has the gift of graphic description, gives us an objective account of his own sensations during a seige of tuberculosis and a thoracoplasty operation. The tuberculosis specialist as well as the general practitioner will read the account with interest.

TUBERCULOSIS—AN INTIMATE CHRONICLE

In 1932 the author discontinued medical school and entered a sanatorium with the diagnosis of moderately advanced tuberculosis. After more than six years of intermittent curing and working, it was decided to collapse the lung by thoracoplasty. Space permits only that part of the story which has to do with the operation. It was scheduled for a Thursday afternoon. The Monday of that week the patient entered the hospital for the routine laboratory tests. He forced fluids, did this patient, to the extent of three quarts a day and between meals he nibbled on a chocolate bar.

The morning of the operation arrived. The breakfast was a scanty one. The entire right side of the chest was shaved. But the event that he remembers most vividly is the enema, his first. He thought his intestines would break unless that eventuality were prevented by premature death from cramps. And he had prescribed enemata not knowing the sensation they produce.

Lunch consisted of six grains of sodium amytal. Soon he was asleep. Thereafter events grew hazy. He was awakened when the nurses came to dress him for the operation but the awakening was perfunctory. Faintly, he realized that one nurse was donning the boot-hose and another was sticking the hypodermic needle into his arm. He must have slept for he did not recall her extracting it. Nor could he remember anything of his transfer from bed to stretcher, the long ride from one building to another, down one noisy elevator and up another, nor the operation room itself. In fact, the next thing he knew he was back in his room, dusk had settled, a few friends were look-

ing through the door and a nurse was beside him. He felt fine and fully awake.

Just then his doctor entered the room and in his bounding, cheerfully, forceful way told him of the good result. "Four ribs practically entirely removed and the lung has collapsed nicely. You probably won't need any more surgery," he added.

That made the patient feel so well that he was tempted to climb over the side guards. The inclination was mental rather than physical and instead, he swallowed a little Vichy and was happy to retain it. Nine p. m. The visitors and well wishers vanished. The nurse pressed out the lights as she withdrew into the corridor, and he was alone.

Well! With nothing to do his mind wandered to his pulse and his fingers were not long in following. He couldn't count it; it was so fast and irregular. But he felt well. Maybe he lay there for an hour when he retched suddenly, forcefully and unexpectedly. He thought his lungs and abdominal organs had popped out through his subclavicular region. He learned then, without aid of a dictionary, what the term exquisite pain means. Strangely enough the wound on which he was lying didn't bother him at all then. For the few subsequent retches he braced himself and instead of having them explode in his chest they were eased over the pharynx with little discomfort.

That first retch seemed to be the signal for the pain to begin. First there was hyperaesthesia around the mouth, probably due to the tightness of the anaesthesia breathing cup. Next, all his

teeth began to ache, and that's not hyperbole. They ached all through that first night. Later, his shoulder began to clamor for self assertion. He didn't sleep very well that night, and occasionally, with the assistance of the nurse, he would turn from back to side, or vice versa, over the big bandage, and each time, try as he would to prevent it, the cautious maneuvering always ended in a thud as if he were rolling up or down a curb.

That first postoperative night he had a drenching sweat, and was quite worn out waiting for the dawn. When it came he slept for some three hours and felt wonderfully improved.

That day when the urinal was handed to him at various regular intervals he could void all right, but it was accompanied by no urgency, only by a sensation of numbness, and he couldn't predict whether he would void an ounce or a pint. The second night the sweat was only dampening. Thereafter they were absent or too mild to be noticed.

The first postoperative days during those few minutes each day when the patient was turned on his unoperated side, dyspnea was almost suffocating. He noticed none at other times.

Although there was some discomfort in the operated shoulder, the pain really didn't come in earnest until the third night. Then his back began throbbing in the region of the wound, and muscles that hadn't been incised were lame. About every half hour he would attempt to relieve the pain by changing his position. This produced more discomfort but little else; for, to the large bandage on his back was now supplemented a shot bag of the general size and shape of a rolled up Sunday newspaper. These two articles effectively kept him in his place.

The night wore on and he was feeling sick and irritable from pain and the lack of sleep; his former resolve to take no pantopon broke down, then and there. It was the first "hypo" that he ever received for the relief of pain. What a great drug it is. In a short time he felt comfortably warm and hazy, a delightful haziness. Gradually, an itchiness appeared all over his skin. He remembered promising himself that he would scratch it later, but before he got to it the night passed, nor does he remember having slept. That didn't annoy him because sleep would have robbed him of that pleasant hazy experience. It was as if, after much work, he had dropped exhausted on the bed, too tired to sleep, and had disintegrated into two people. The one who had pain was unimportant; the important, the conscious one was looking nonchalantly on and not minding it.

On the fourth postoperative day, a small three-pound shot bag was cradled in the right subclavicular region. It later was accompanied by a severe headache in the right frontal and occipital regions. The patient had never been subject to headaches, and the occurrence of headache after wearing that shot bag, and a larger one, was noticed too frequently to be mere coincidence. There was a relationship between them.

Saturday, two days postoperatively, he had his second enema. The following Monday he had his last. They confirmed his original opinion of them. They gripe—and that's not slang.

The big bandage was removed one week postoperatively, as were the skin sutures. The scar was a nice one. Naturally he was interested in trying to move his arm. There were definite weakness, soreness and limitation of motion, but he could move it surprisingly well. He roughly estimated it to have maintained about three-fourths of its normal function in all directions. Thereafter, each day, he grabbed hold of the steel bars at the head of the bedstead and worked his arm progressively further along it. Within a month postoperatively there were only stiffness and weakness, without any real limitation compared with the other side. Within six weeks all the stiffness had disappeared, and, except for definite weakness, the arm was quite normal. The weakness was especially marked when he held the arm out in front of him, particularly when he elevated it above the shoulder.

Four days postoperatively, with the aid of a toe hold on the foot of the bedstead, he was able to sit up unassisted, but he didn't feel quite well until ten days postoperatively.

Six weeks postoperatively the collapse as shown on the X-ray film appeared to be excellent and it was decided that one stage of four ribs was all that he needed. The following week he returned home (and with the aid of a diary began to write a few notes regarding the operation).

One day he dropped his pencil under the bed and in an effort to regain it had to get down on his knees and reach forward, upward and outward so that the scapula on the operated side was rotated far forward and elevated. He retrieved the pencil all right but the angle of the scapula somehow climbed over the fifth rib, and on its way back nestled inside the rib leaving him in little pain but greatly embarrassed. Slowly, he manipulated the scapula back into place. The scapula hasn't locked since, but when he hunches his shoulder far upward and forward he can still

feel a bumping of the angle of the scapula as it goes over the fifth rib.

Before the right pectoral muscles had regained much tone he could place his fingers in the depression left by the excised ribs and feel the muscles on the pleural side of the scapula, and could push the scapula backwards. Now, six months after the operation, this can no longer be done.

As long as four months postoperatively, the patient could still feel very occasionally a vague pinching in the region of the scar and thought perhaps it was due to regeneration of the nerves.

Your chronicler hopes to continue to observe the result of this operation, and report more fully on its outcome after sufficient time has elapsed to properly evaluate its benefits and shortcomings.

Tuberculosis—An Intimate Chronicle by John A. O'Hale, *Amer. Rev. of Tuber.*, Nov. 1940.

THIRTEENTH ANNIVERSARY NUMBER OF THE HAROFÉ HAIVRI

"The Hebrew Medical Journal"

The attention of the medical profession is directed to the appearance of a special issue of HAROFÉ HAIVRI (The Hebrew Medical Journal), a semi-annual publication, edited by Dr. Moses Einhorn. This volume commemorates the thirteenth anniversary of this journal and is dedicated to Prof. Sigmund Freud.

The founders had faith in the vitality and growth of modern Hebrew and foresaw that a Hebrew medical publication would be of inestimable value in the development and advancement of Hebrew medical literature; also, it has proved to be of particular service to the medical department of the Hebrew University in Jerusalem.

The contents of this Journal are not confined to technical medical topics, but are divided into several sections covering a variety of related subjects, such as Medicine in the Bible and Talmud, Old Hebrew Medical Manuscripts, Palestine and Health, etc. Among the contributors to the medical and editorial sections, have been such prominent physicians as I. S. Wechsler, A. Rongy, S. Solis-Cohen, B. Crohn, R. L. Kahn, J. Bullowa, D. Macht, etc.

For further information, communicate with the editorial office of the HAROFÉ HAIVRI, 983 Park Avenue, New York City.

The only person to whom a Doctor can say exactly what he thinks about another Doctor is his wife. That is why practically all Doctors are married.—Joyce Dennis.

OBITUARY

PAUL HAMILTON PHILLIPS, aged 59, of Ashdown, died of a heart attack in a Texarkana hospital December 30th. Born in Texarkana, Texas, he graduated from the Tulane University of Louisiana in 1904. He married Miss Betty Millwee, who survives him, in 1907. An active worker in organized medicine, he had served the Little River County Medical Society as president for the past 6 years, had represented the county society on numerous occasions in the House of Delegates of the Arkansas Medical Society, and was a member of The State Medical Board of the Arkansas Medical Society. He was also a member of the Presbyterian church, of the Knights Templar and the Shrine.

BART WAYNE FREER, age 69, Fort Smith, died December 29th after a long illness. Born at Eddyville, Kentucky, March 15, 1871, he graduated from Memphis Hospital Medical College in 1902, first locating at Nowata, Oklahoma, later coming to Fort Smith in 1913. He was a member of the Goddard Memorial Methodist church, of the Woodmen of the World and of the Modern Woodman. He is survived by his wife, the former Emily S. Koenig, to whom he was married in 1914 and one daughter.

THOMAS JOE STEWART, age 63 years, died at his home in Wynne January 7th after an illness of over two years. Born near Pontotoc, Mississippi in 1878, he graduated from the University of Tennessee College of Medicine in 1902, first locating in Mississippi, later moving to Cherry Valley, Colt and Vandale, before locating in Wynne in 1912. A member of the Cross County Medical Society, in which he held the various offices, he had also served as Councilor of the Arkansas Medical Society from the Third District in 1937-38 and 1938-39 and as Third Vice-president in 1939-40. He was a member of the Baptist church. Surviving relatives are his wife, two sons and a daughter.

ALEX F. WILLIAMS, age 62 years, of Cornerville, died at Eupora, Mississippi, December 29th, while on a visit. For many years he had practiced in Lincoln county where he was an active member of the Lincoln County Medical Society. Surviving relatives are a brother and a sister.

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Second District—L. T. EVANS	Batesville
Third District—J. O. RUSH	Forrest City
Fourth District—S. W. DOUGLAS	Eudora
Fifth District—R. B. ROBINS	Camden
Sixth District—H. E. MURRY	Texarkana
Seventh District—EUCLED M. SMITH	Hot Springs
Eighth District—F. A. CORN, JR.	Lonoke
Ninth District—J. F. JOHN	Eureka Springs
Tenth District—CLYDE McNEIL	Rogers

THE NYA HEALTH PROGRAM

The National Youth Administration has placed into effect a nation-wide health program to serve the needs of its young workers in order to strengthen the nation's vital defenses by building a strong and healthy population. This effort will be directed along three lines: (1) A physical appraisal, by means of a competent health examination, of every youth assigned to a NYA job; (2), Correction of health defects through maximum utilization of community resources, through the use of supplementary medical and dental services provided where possible by the NYA and through developing in youth an interest in improving their health by their own personal efforts, and (3), Improved technical advice and assistance with respect to all NYA efforts having a direct and immediate bearing on the health of youth workers, such as nutrition, sanitation, physical development and recreation.

A state health supervisor, advised by a physician as health consultant, will direct the program. The examinations of youth will be made by the physicians of the immediate locality and will be done in full cooperation with the respective

county medical societies. The examination follows a nationally prescribed form and includes provision for necessary vaccination, routine serologic test and urinalysis, and for routine chest roentgenogram or tuberculin test.

The NYA health program is not a medical care program, as responsibility for providing medical care for intercurrent illnesses of the employed young persons will remain with the family or community except for the small group who are residing on projects, about ten in number in Arkansas.

The full cooperation of the medical and dental profession has been requested by the NYA Administrator in Arkansas and the program as outlined has been approved by the Council of the Arkansas Medical Society and by the Arkansas Dental Association. An advisory committee has been appointed of Dr. S. J. Wolfermann, for the Arkansas Medical Society; Dr. I. M. Sternberg, for the Arkansas Dental Association, and Dr. W. B. Grayson, for the Arkansas State Board of Health.

County medical societies will be advised well in advance and their full cooperation requested as the program is inaugurated within the respective counties.

EDITORIAL COMMENT

ASSESSMENTS WAIVED FOR MEMBERS IN MILITARY SERVICE

The Council has authorized waiver of the 1941 membership assessment in the Arkansas Medical Society for those physicians who were members in good standing in 1940 and who have entered military service. Insofar as state society membership is concerned, these physicians will be considered in good standing for the year 1941 and thus eligible to all of the privileges of membership. However, membership cards cannot be issued, nor membership assessments in the state society be waived, until due notice is received from the respective county societies that county membership dues have been paid or waived. County society secretaries are requested to promptly advise the state secretary of action taken in the county societies in this regard in order that membership cards may be issued. It is also desired that each physician entering military service notify the state secretary, giving his military rank and correct military address, in order that mailing lists may be revised to insure continued receipt of The Journal of the Arkansas Medical Society. The Society wishes these members, temporarily absent in the service of our country, a year of profit and all happiness while away from home.

PROCEEDINGS OF SOCIETIES

Boone County Medical Society has elected the following officers: President, Ulys Jackson; Vice-president, H. H. Poynor; Secretary-treasurer, J. G. Gladden; Delegate, Ulys Jackson, and Alternates, Ross Fowler and H. H. Poynor.

The Searcy County Medical Society has elected the following officers: President, E. W. Wood, Marshall; Vice-president, J. O. Leslie, Marshall; Secretary-treasurer, Sam G. Daniel, Marshall; Delegate, E. G. Fendley, Leslie, and Alternate, Sam G. Daniel.

Chicot County Medical Society has elected the following officers: President, W. J. Hutson, Eudora; Vice-president, C. G. Leverett, Eudora; Secretary-treasurer, W. J. Schwarz, Lake Village; Delegate, W. D. Easterling, Lake Village, and Alternate, W. A. Craig, Eudora.

Desha County Medical Society has elected C. H. Kimbro, Tillar, President, and Gibbs Biscoe, Dumas, Secretary-treasurer for 1941.

The Fifth Councilor District Medical Society was addressed at El Dorado January 7th by Paul Mahoney and H. W. Hundling of Little Rock. Officers elected are: John Wilson, Magnolia, President; A. D. Cathey, El Dorado, Vice-president, and Rowland Robins, Camden, Secretary.

The Medical Arts Club of Little Rock has elected the following officers: President, Carl A. Rosenbaum; Vice-president, R. E. McLochlin; Secretary, W. Myers Smith; Treasurer, Wilfred Parsons, and Corresponding Secretary, Howard Stern.

Lincoln County Medical Society has elected the following officers: President, C. W. Dixon, Gould; Vice-president, G. W. Ringgold, Gould, and Secretary-treasurer, L. T. Taylor, Star City.

The Okmulgee-Okfuskee County Medical Society was addressed January 13th at Henryetta, Oklahoma, by I. F. Jones, "Post-partum Hemorrhage"; D. W. Goldstein, "The Diagnosis of Syp-

hilis" and Chas. T. Chamberlain, "Tachycardia and Its Treatment," all speakers of Fort Smith.

Washington County Medical Society has elected the following officers: President, R. H. Huntington; Vice-president, H. H. Howze; Secretary-treasurer, V. O. Lesh; Delegate, Ruth Ellis Lesh, and Alternate, A. A. Gilbert, all of Fayetteville.

Conway County Medical Society has elected the following officers: President, J. F. Halbrook; Vice-president, C. E. Etheridge, and Secretary-treasurer, C. Ray Williams.

The Lawrence County Medical Society met with J. C. Land, Walnut Ridge, January 14th for the following scientific program: "Goiter," C. C. Townsend, Walnut Ridge, and "Economics of Syphilis," J. B. Elders, Walnut Ridge. Officers for 1941 were installed.

J. B. Elders, Secretary.

The Miller County Medical Society has elected the following officers: President, L. H. Lanier; Vice-president, D. W. Smith; Secretary-treasurer, J. W. Burnett; Censor, Geo. W. Parson, and Delegate, L. J. Kosminsky.

The Independence County Medical Society met in dinner session at Batesville January 13th. A motion picture, "Thyroidectomy" was presented as the scientific program.

W. J. Ketzer, Secretary.

The 65th annual banquet session of the Sebastian County Medical Society was held in Fort Smith January 14th with addresses by the retiring president, H. C. Dorsey, and the incoming president, Hugh Johnson. T. P. Foltz served as toastmaster.

W. F. Adams, Secretary.

Phillips County Medical Society has elected the following officers: President, Edward Kultgen, Elaine; Vice-president, W. B. Connolly, Helena; Secretary-treasurer, H. H. Rightor, Helena; Delegate, A. H. Maddox, Elaine, and Alternate, J. Q. Blackwood, Helena.

PERSONALS AND NEWS ITEMS

Dr. and Mrs. J. Q. Blackwood, Helena, spent a Christmas vacation in Morrilton.

E. J. Stroud has been elected a director of the Jonesboro Chamber of Commerce.

Elizabeth Fletcher Dishongh recently addressed the Little Rock Council of Church Women.

W. H. Newkirk, Berryville, has been ordered to active duty as Captain, Medical Corps, U. S. A., and assigned to Base Hospital, Camp Robinson.

The following reserve medical officers have been ordered to active duty at the Medical Field Service School, Carlisle Barracks, Pennsylvania: Capt. O. G. Hirst, Prescott; Lt. T. L. Adair, Bald Knob; Lt. B. P. Briggs, Little Rock; Lt. H. D. Fowler, Little Rock; Lt. E. J. Ritchie, North Little Rock, and Lt. T. S. Van Duyn, Stuttgart.

Homer A. Higgins, Little Rock, has been called to active duty as Commander, U. S. Naval Medical Corps, and assigned to the Selective Service office in Arkansas.

The following have been called to active duty with the 153rd Infantry, Arkansas National Guard, at Camp Robinson: Lt. Col. Howell Brewer, Hot Springs National Park; Major H. C. Brooke, Conway; Lt. C. A. Archer, Jr., DeQueen; Lt. C. L. Hyatt, Little Rock.

H. C. Brooke, Conway, has been promoted to Major, Medical Corps, Arkansas National Guard.

F. D. Smith has been elected physician for the Royal Neighbors at Blytheville.

L. S. Dunaway has been appointed physician to Arkansas State Teachers College at Conway during the absence of Hugh C. Brooke on military duty.

Fred Krock recently addressed the Noon Civics Club of Fort Smith on "Newer Surgical Methods."

A. F. Hoge has been elected a director of the City National Bank at Fort Smith.

Sam Phillips has been elected a member of the executive committee of the Little Rock Council of Social Agencies.

T. Duel Brown, Little Rock, took special work at the Mayo Clinic during January.

Dr. and Mrs. C. M. Harwell, Osceola, are on a two-months' cruise to South America.

Joseph F. Malloy, formerly of Omaha, has become associated with F. A. Gray at Batesville.

E. L. Handley has moved into a new clinic building at Pocahontas.

W. J. Ketz has become associated with O. J. T. Johnston at Batesville.

In lieu of the usual January session of post-graduate study, the Committee on Postgraduate Study presented C. L. Scudder at Little Rock January 22nd on the subject, "Rupture of the Nucleus Pulposus."

W. B. Grayson, Little Rock, and W. G. Hodges, Malvern, have been appointed to the State Board of Embalmers.

Ralph E. Crigler, Fort Smith, recently addressed the Spradling P. T. A. on "The Community Conscience."

J. D. Johnson, Fort Smith, has been called to active duty as Captain, Medical Corps, United States Army, and assigned at Fort Snelling, Minnesota.

Dr. and Mrs. M. V. Russell, El Dorado, spent a winter vacation in Miami, Florida.

C. S. Paddock, formerly of Memphis, has located at Fayetteville.

L. E. Ellison has moved from Saint Louis to Warren where he will engage in practice.

Harold G. F. Edwards, Shreveport, Louisiana, addressed the Jefferson County Medical Society, Pine Bluff, Ark., January 7th, on "Carcinoma of Cervix and Corpus Uterus: A Study of 800 Cases."

J. F. John has been elected a director of the Bank of Eureka Springs.

The Little Rock Chamber of Commerce was recently addressed by S. P. Cromer, S. C. Fulmer, Jos. F. Shuffield and C. A. Rosenbaum.

F. C. Maguire has been transferred from Monroe county to Mississippi county as health director.

O. R. Kelly has been elected a director of the Grant County Bank at Sheridan.

C. P. Sisco has been elected a director of the First State Bank at Springdale.

D. L. Owens has been elected a director of the Harrison Country Club.

H. E. Mobley has been elected a director of the Federal Savings and Loan Association at Morrilton.

J. M. Kolb, Clarksville, has been elected a director of the Johnson County Progressive Club.

"Local Use of Sulfanilamide in Trachoma; Preliminary Report" by K. W. Cosgrove, Little Rock, appeared in the August issue of the American Journal of Ophthalmology.

C. B. Billingsley and Ralph E. Crigler have been elected 1st vice-president and secretary, respectively, of the Boy's Club of Fort Smith.

D. E. White has been elected president of the El Dorado Library Board.

RANDOM THOUGHTS OF THE SECRETARY

January 1st. Visting Fayetteville where we find Jim Lewis on the job; other physicians quietly celebrating the advent of a new year of promises.

January 4th. This evening our goddess of misfortune places a rock in the way of our foot and tumbling down we go, carrying a sackful of bottles (see advertising section for the name if you wish—otherwise listen to the tale as related by Wolfermann, Chamberlain and Foltz), inflicting a curvilinear laceration on the thenar eminence of the left hand for which we, of necessity, seek medical attention. This Wolfermann does in handy fashion—we salute local anesthesia for suture of these wounds—not omitting to place a suture or so beyond the border of anesthesia.

January 5th. Explaining to the unbelievers takes the major portion of our day.

January 7th. In conference over the proposed NYA health program in Grayson's office. For once it appears that there exists a sincere desire on the part of a governmental agency to seek the full cooperation of the medical profession in a matter requiring professional service; a desire which is complemented by every indication that the cooperation will be similarly met and that professional services will receive remuneration.

January 11th. This day, changing physicians as is the patient's choice, we go to Bill Adams, who deftly removes a few sutures from our hand, all in a reverse movement.

January 12th. The Council meets enjoying a good Frederica luncheon in Little Rock, discussing many an affair of the Society with a most satisfactory attendance of councilors and past-presidents. As of yore, we attend in the company of Wolfermann and recall many another trip to the capital city.

January 13th. With Goldstein and Jones in reticent mood, but Chamberlain exuberant in conversation, journeying forth to Henryetta where these satellites expound variously to the Oklahomans and your correspondent exhorts the banqueteers to contributions for Greek war relief, reaching the quota. Sustaining our second accident of the month—let us hope that old rule of three does not prevail—we sprain an ankle.

January 22nd. Again to Little Rock with Wolfermann where a comparative youngster, Scudder, sets a pattern of right living as a means of reaching a happy stage of age. We condone with the postgraduate committee over the attendance and continue to wonder just what quirk it is which keeps physicians from meetings, certain to profit.

January 23rd. Busy in the state house and its annex, the Marion, with House Bill No. 84, hoping that the profession will realize full well the necessity of concerted and vigorous action if our standards are to be maintained.

January 24th. Boarding the Rock Island at Little Rock this morning at two, we busy ourselves in getting to bed to make the most of a four-hour ride to Mansfield. Awakening, startled at the time, eight o'clock, raising the shade to note the Arkansas river alongside the track and Pinnacle Mountain just across, subsequently to discover that engine failure had kept us there all morning. Shortly away, glad to be met at Booneville at one, and homeward seven or more hours late for appointments which we had planned to keep.

January 25th. Hearing today of the difference between virtue and vice-virtue being that which you learn at your mother's knee; vice, that which you learn at some other joint.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Mrs. R. B. Robins and Mrs. J. S. Rhinehart entertained members of the Ouachita County Medical Auxiliary on Thursday night in the home of Mrs. Robins with a buffet supper. Christmas decorations were used in the dining room.

A short business meeting was held with reports from the chairmen. Mrs. J. B. Jameson made a report of the medical society meeting held in Louisville during November.

Marian Pope Talton reviewed the book, "Doc's Wife" by Fay Lewis.

The Auxiliary to the Pulaski County Medical Society entertained Wednesday at the Woman's City Club with a luncheon for 42 members and guests with Mrs. D. A. Rhinehart and Mrs. Paul Fulmer, hostesses. The tables were beautifully decorated with holly, poinsettias and lighted red candles. Mrs. S. C. Fulmer, president, presided over the business meeting. The Auxiliary voted to give \$5.00 to the Arkansas State T. B. Library Fund, \$5.00 to the Student Friend of which Mrs. Paul Autry is chairman and to donate to the Penny Art Fund. Mrs. Carl Rosenbaum, membership chairman, introduced Mrs. Hoyt R. Allen and Mrs. Charles Henry as new members. Mrs. A. C. Shipp, program chairman, presented Mrs. R. E. Overman, pianist, and Mrs. I. B. Richardson, vocalist. Mrs. Clyde Beck, guest of Mrs. S. C. Fulmer, and Mrs. James Humbert, guest of Mrs. J. P. Sheppard, were introduced. Reports were given by Mrs. C. E. Oates, delegate to the City Federation, Mrs. A. K. Wayman, Mrs. R. T. Smith, chairman of medical students' wives; Mrs. Estes Allen, chairman of entertainment; Mrs. L. F. Barrier, chairman of the visiting committee; Mrs. W. L. Sadler, publicity secretary, and Mrs. Paul Fulmer, chairman of the Student Loan Fund, reported that her committee, Mrs. K. W. Cosgrove, Mrs. C. E. Oates, Mrs. J. C. Cunningham and Mrs. C. W. Switzer, had a food sale at the University of Arkansas Medical School and also held a rummage sale. They plan to sponsor a book review at a later date.

On December 16, Dr. and Mrs. H. T. Smith, and Dr. and Mrs. Marion Leverett of McGehee gave a dinner party at the home of Dr. and Mrs. H. T. Smith, with the members of the Southeast Arkansas Medical Society and their wives as guests.

The large table in the dining room was lovely with a centerpiece of red and silver ornaments, with red candles in silver holders. The entire house was gay in holiday decorations, each room having an individual color scheme.

At eight o'clock a delicious turkey dinner was served to 26 guests. After dinner the doctors held a business session in the dining room, while the ladies were invited into the living room to make final plans to send a box of fruit to the Children's Home at Monticello. Following a period of games and contests, the jingle of Santa Claus' bell called the group to the sun parlor, where there was a large tree a-blaze with brilliant lights, decorations and

interesting packages. The gifts were distributed and opened to show the accomplishments of each toy and noisemaker.

After all the merriment, and in a more serious mood, all gathered around the piano and sang the loveliest of Christmas Carols, "Silent Night," and then departed for homes in the different counties.

Mrs. M. C. Crandall,
Publicity Secretary.

A beautiful Christmas banquet was given Saturday evening at Hotel McCartney by members of the Bowie and Miller Medical Auxiliary in compliment to their husbands, the dinner being served in the club room where holiday appointments were featured throughout in the decorative scheme.

Mrs. William Hibbitts, Mrs. S. A. Collom, Mrs. T. E. Fuller, Mrs. C. W. Kelley, Mrs. P. H. Phillips and Mrs. W. H. Daubs were hostesses and featured a red and green color note in the table appointments. The table laid with red and gold metal paper cloth, held green sprays and native red berries, interspersed with red candles. Hemlock, metallic foliage and gold bubble balls, surrounded by red candles and yupon holly, fashioned an effective centerpiece and decorative Santa Claus in red and blue velvet added an additional holiday note.

Favors were miniature white sleighs with chenille Santa Claus, holding appropriate gifts, packaged in red and green cellophane, for all the guests.

Dr. Preston Hunt gave the invocation and Dr. William Hibbitts acted as toastmaster. Mrs. Hibbitts, president of the Texas State Medical Auxiliary, and Dr. Hunt, president of the Texas Medical Association, were introduced, as were charter members of the Bowie and Miller Medical Auxiliary. These were Mrs. S. A. Collom, Mrs. E. M. Watts, Mrs. Charles Adna Smith, Sr., Mrs. L. H. Lanier, Mrs. J. T. Robinson, Mrs. Harry E. Murry, Mrs. William Hibbitts, Mrs. T. F. Kittrell, Mrs. L. J. Kosminsky and Mrs. R. H. T. Mann.

Mrs. Ralph Cross announced that the local Auxiliary had obtained more subscriptions to Hygeia than any other organization in the American Medical Auxiliary, and Mrs. Allen Collom, Jr., announced further plans for presentation of Dr. W. W. Bauer, editor of Hygeia, here in January.

Mrs. Roy Baskett, chairman of the entertainment committee, was assisted by Mrs. Harry Murry, Mrs. William Hibbitts, Mrs. Ralph Cross, Mrs. Perry Priest, Mrs. Louis P. Good and Mrs. H. E. Longino.

Latane Temple was guest speaker and presented a humorous talk on "Medical Research," giving it in satirical fashion.

Pupils under the direction of Pauline Harris Lowry presented a floor show, with Mrs. Ralph Brody as accompanist, Edna Clell McGraw gave a song and dance, and announced the following numbers: "Doctor's Reverie," Helen Platz; "Tonic and Sedative," tap dance, Eileen Brody and Charlene Hackett; "Dance Classique," a pre-

scription for ennui, Betty Jo Booker; "Portion of This and Portion of That," tap dance, Patsy Hackett and Roy McCowan, Jr.; song, "Santa Claus Is Coming to Town," Mary Maddox Collom and Helen Platz.

A Christmas quiz program was enjoyed with prizes being awarded to Dr. N. B. Daniel, Dr. R. R. Kirkpatrick, Dr. Richter, Dr. C. H. Frank, Mr. and Mrs. Latane Temple and Mary Maddox Collom. Group singing was led by Dr. L. J. Kosminsky and a quintet, composed of Mrs. Baskett, Mrs. Allen Collom, Jr., Mrs. Hibbitts, Mrs. Kosminsky and Mrs. Daniel gave several numbers.

The guest list included Mr. and Mrs. Temple, Dr. Hunt, Dr. J. Wirt Burnett, Dr. Richter, Dr. Dickenson, Mary Maddox Collom, Dr. and Mrs. Baskett, Mrs. S. A. Collom, Dr. and Mrs. Allen Collom, Jr., Dr. and Mrs. Ralph Cross, Dr. and Mrs. C. H. Frank, Dr. and Mrs. William Hibbitts, Dr. and Mrs. C. W. Kelley, Dr. and Mrs. J. T. Robinson, Dr. and Mrs. Charles Adna Smith, Jr., Mrs. Charles Adna Smith, Sr., Dr. and Mrs. Joe E. Tyson, Mrs. E. M. Watts, Dr. and Mrs. W. F. Bessonet, Dr. and Mrs. N. B. Daniel, Dr. and Mrs. R. R. Kirkpatrick, Dr. and Mrs. T. F. Kittrell, Dr. and Mrs. L. J. Kosminsky, Mrs. L. H. Lanier, Mrs. A. G. Lee, Mrs. R. H. T. Mann and Mrs. Harry E. Murry.

Each doctor was presented a boutonniere upon arrival.

Mrs. Joe Tyson is president of the local auxiliary and gave a welcome to the doctors in the form of a toast following the invocation.

Mrs. Alfred Hathcock of Fayetteville, president of the Arkansas Medical Auxiliary, was the guest of honor at the meeting of the county organization Monday evening at the home of Mrs. O. J. T. Johnston.

Prior to the auxiliary meeting the group met with the county medical society for a dinner at the Marvin Hotel at 7 o'clock. During the dinner which was served at one T-shaped table decorated in the seasonal motif with chrysanthemums and Christmas decorations, two new members in the auxiliary were introduced, Mrs. Wesley J. Ketz and Mrs. Ralph Weddington. Mrs. P. L. Hathcock of Fayetteville, who accompanied her daughter-in-law, was also a special guest.

Following the serving of the delicious turkey dinner the auxiliary members adjourned to the home of Mrs. O. J. T. Johnston for the program-business session with Mrs. J. J. Monfort, president, in charge of the program. During the business session Mrs. C. A. Churchill gave a report of the meeting of the Southern Medical Association which she attended at Louisville, Ky.

At the conclusion of the business meeting the program was turned over to Mrs. Hathcock who gave an interesting address to the group. Mrs. Hathcock stated that the organization was formed in order that the women could stand shoulder to shoulder with their husbands in their work. Other purposes she mentioned were assistance in the eradication of disease, self-education, public education, and the dispensation of information. She discussed the eight-point program which the auxiliary follows stressing the distribution of the "Hygeia" magazine, pushing the student loan fund and study of legislation of professional interest. Mrs. Hathcock's impressive address was followed by a round table discussion of the work of the auxiliary.

At the conclusion of the program session an informal social period was enjoyed. The high light of this period

was the presentation of gifts from the beautifully decorated Christmas tree. Mrs. Johnston's home was gala for the occasion with decorations continuing the holiday theme. In addition to the tree, gay Christmas lights were placed in the windows and other seasonal arrangements were placed about the rooms. The Christmas spirit was enhanced by carols softly played by Mrs. J. E. McCormack at the piano as the group assembled.

In addition to the two new members and the two guests of honor, Mrs. McCormack was a special guest. Members who attended the meeting were Mesdames J. M. Hooper, Victoria Saylor, T. N. Rodman, J. H. Kennerly, R. C. Dorr, Finis Wyatt, C. A. Churchill, J. J. Monfort, C. G. Hinkle, Johnston, L. T. Evans, M. S. Craig, I. M. Huskey and Mrs. V. D. McAdams. Hostesses for the event were Mesdames Johnston, Craig, Huskey and McAdams.

On December 3, 1940, the women of the Medical Auxiliary met at the home of Mrs. Fred Morrow with Mrs. R. T. Henry, co-hostess, for their annual Christmas party. Thirteen members were present. The hostesses served a delicious dinner. Decorations in the Christmas color scheme of red and white were attractively arranged for the table setting.

A gift from our Auxiliary to our state president, Mrs. Alfred Hathcock, was presented at the close of the dinner.

A short business meeting followed, at which time plans were discussed for a public relations meeting this month, with speakers explaining the Community Hospitalization Plan to the citizens of Fayetteville. It was discussed whether or not we would carry out this public meeting in conjunction with members of the Parent-Teacher's Association, and agreed to do so. Plans are now being made for this public meeting before the first of the year.

Following the meeting, gifts for sick children at the City Hospital were presented by the Auxiliary members. This is an annual custom of the Auxiliary. Mrs. G. T. Lewis presided at the business session.

The next meeting is to be a dinner meeting and will be held at the Washington Hotel January 7, 1941. Mrs. Loyce Hathcock will speak on "State Hospitalization Needs."

Mrs. James F. Lewis,
Washington County President.

On December 12, the Washington County Medical Auxiliary sponsored in conjunction with the Parent-Teacher's Association of the city of Fayetteville, a public relations meeting at which time Mr. R. W. Batts explained to the people how the plan of the Community Hospitalization would help them. Large attendance at the four meetings he spoke before was very pleasing. Mrs. Fount Richardson introduced the speaker at the two afternoon meetings; and Mrs. H. Howze introduced him to the audience at the two evening meetings.

Saturday, December 14th, a tea was given by Mrs. Fount Richardson at her home for doctors, druggists and dentists' wives. A great many attended, coming from Prairie Grove, Bentonville, Rogers, Springdale as well as those from Fayetteville. Mrs. H. Howze and Mrs. Fount Richardson greeted the guests at the door. Mrs. Alfred

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I. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

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LITTLE ROCK, ARKANSAS

Hathcock poured tea at a beautifully decorated table. Xmas motif was carried out in the arrangement of cedar boughs, red candles and decorative balls. The delicious refreshments were enjoyed by everyone.

Mrs. James F. Lewis,

Mrs. Alfred Hathcock of Fayetteville, state president of the Auxiliary of the Arkansas Medical Society, paid her first official visit to the Auxiliary of the Sebastian County Medical Society January 14th, when she and Mrs. Fount Richardson, secretary of the state Auxiliary, also of Fayetteville, were guests of honor at a luncheon and meeting of the local organization at the home of Mrs. Ruth Moss Carroll, 400 North Greenwood Avenue.

Mrs. Hathcock was a speaker on the program, her theme, "Service to Humanity."

Mrs. I. Fulton Jones, vice-president of the Auxiliary, presided at the meeting in the absence of the president, Mrs. M. E. Foster. Hostesses were Mrs. W. R. Brooksher and Mrs. D. W. Goldstein. In addition to the guests of honor guests were Mrs. C. H. Finney, Mrs. B. B. Bruce, Alma, and Mrs. G. G. Woods, Huntington.

Members present were Mrs. I. Fulton Jones, Mrs. W. F. Adams, Mrs. S. P. Stubbs, Mrs. A. A. Blair, Mrs. Charles T. Chamberlain, Mrs. Walter Eberle, Mrs. E. E. Scott, Mrs. Everett Moulton, Mrs. J. L. Kelleam, Mrs. J. S. Southard, Mrs. Carl L. Wilson, Mrs. S. J. Wolferman, Mrs. W. F. Rose and the hostesses.

Mrs. W. F. Rose,
Publicity Chairman of Auxiliary to the
Sebastian County Medical Society.

HEALTH JEOPARDIZED

Encroachment of government in fields of private endeavor invariably destroys confidence. The sense of security vanishes in direct ratio to dependence on government and the fear induced by political domination.

Encroachment of government in the field of medicine and medical practice can lead only to progressive deterioration. It will lead to a creeping paralysis which will place the health of every individual in jeopardy.

BOOK REVIEWS

The 1940 Year Book of Public Health: Edited by J. C. Geiger, M. D. D. P. H., Director of Public Health, City and County of San Francisco, Clinical Professor of Epidemiology, University of California. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago, Ill. Pp. 560. Price \$2.50.

No public health officer or any other physician interested in public health can afford to be without this studiously edited annual of outstanding contributions in the world's literature pertaining to the many phases of public health. Carefully selected and rich in pertinent editorial comment, this Year Book forms an indestructible link in the chain which marks the progress and development of public health in this country.

A Textbook of Clinical Pathology. By Roy R. Kracke, M. D., Emory University, Georgia, and Francis P. Parker, Emory University, Georgia. Second edition. Pp. 780. Illustrated. Price \$10.00. Baltimore: The Williams and Wilkins Company, 1940.

Fourteen experienced teachers have collaborated in writing this book, covering the wide field of pathology in a most practical manner. All the more recent laboratory methods are presented, such as those for the hormones and vitamins and for the blood concentrations of the sulfonamides. Emphasis has been given to "the one most reliable and simple technic for each laboratory procedure."

The Practice of Medicine. By Jonathan Campbell Meakins, M. D., LL. D., Professor of Medicine and Director of the Department of Medicine, McGill University. Third edition. Pp. 1430 with 562 illustrations, 48 in color. Saint Louis: C. V. Mosby Company, 1940.

Meakins has again written an outstanding text, primarily of value to the medical student and general practitioner. Particularly complete and well-presented is the chapter on diseases of the lungs with a discussion of chemotherapy in pneumococcic infections. The numerous illustrations, many of which are in color, enhance the practical quality of the book. This is a welcome addition to any medical library.

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THE CLIMACTERIC: SOME PHASES IN ITS MANAGEMENT *

WM. P. SADLER, M. D.**
Minneapolis

The climacteric is a very critical era in a woman's life. It is characterized by symptoms of nervous and vasomotor origin. The menopause is the physiologic cessation of the menstrual cycle. Symptoms associated with this syndrome may appear years before cessation of menstruation. The end is not sharply delimited. Many women show isolated symptoms into old age. Correctly speaking, the syndrome should cover a premenopausal, a menopausal and a postmenopausal phase. The duration of the climacterium is variable. Menstruation may cease abruptly or gradually. Symptoms may be mild and brief or may persist for years. Marked individual variation in clinical manifestations and intensity of symptoms exists. Probably no more than 20% of women exhibit sufficiently severe symptoms to cause consultation with their physician.

Other than the regressive changes in the ovaries, genital tract and breasts, increased lipid content of the adrenal cortex and excess vascular sclerosis of the thyroid, no characteristic morphologic changes occur in the organs during the climacteric. The variegated symptomatology of this syndrome is based upon the concept of a functional disturbance.

Our present knowledge of the various body hormones gives us the key to the etiology of the climacteric disturbances. The hormones are regulators of the body functions and in turn regulate each other. We are all acquainted now with the one-two relationship of the gonadotropic hormones of the anterior pituitary and the estrogenic ovarian hormones. The ovary needs

the gonadotropic hormone to be stimulated to function and produce follicular hormone (estrin). Conversely, estrin exhibits an inhibitory action upon the gonadotropic hormone of the anterior hypophysis. This mechanism is in delicate balance. The functional life of the ovary is limited, and with the advent of the climacterium this balance is disturbed. A hypoestrinism ensues and an increased elaboration of gonadotropic hormone takes place. Other interrelated glands such as the thyroid and adrenals as well as the autonomic nervous system are thrown out of equilibrium. This gives rise to a whole train of subjective symptoms due to autonomic nervous system instability. Therefore, it may be seen that symptoms referable to most all of the body systems may arise.

However, the systems usually involved are the reproductive system (amenorrhea, irregular menses, scanty menses, profuse hemorrhages at regular or irregular intervals), endocrine system (pituitary, hypo- and hyperthyroidism), nervous system (headache, dizziness, insomnia, drowsiness, numbness in legs, emotional upsets, melancholia and various sensory disturbances), circulatory system (arterial hypertension, climacteric hypertension, vasomotor phenomena such as hot flushes and hot flashes, profuse sweats, suffocating sensation, tachycardia dyspnea and cardiac arrhythmias), metabolic system, (obesity, arthritis), digestive system, (flatulence, eructation, appetite vagaries, constipation, diarrhea), and cutaneous system (acne, eczema, pruritus vulvae, kraurosis vulvae, vaginitis).

Since it seems clear that estrin deficiency in the climacteric woman initiates the hormonal and nervous imbalance responsible for these distressing symptoms, the rationale of substitutonal estrogenic therapy needs no further elaboration.

The treatment of this syndrome has gained much impetus within the last five years because pure estrogenic hormones have been made avail-

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Ft. Smith, April 16, 1940.

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able in concentrated form. Much confusion exists regarding the chemical and biologic differences in the various estrogenic substances. There is much variation in the designation of dosage. Rat units, international units and the weight of crystalline hormone are employed; also, the terminology used needs clarification.

We owe it to ourselves and our patients to be properly informed upon this subject in order to avoid wasteful and unintelligent estrogenic therapy. This is one phase which I wish to discuss. A brief resume of some points in our present knowledge of the male and female sex hormones will be helpful. Male hormones are included because it is now definitely known that the sex hormones are bi-sexual. One of the richest sources of the estrogens (by weight) is the bull testes and (by volume) the stallion's urine.

Where the action of the sex hormone is pro-female they are termed gynecogenic; promale, androgenic. Androgen is a collective term designating those substances showing promale activity, i. e., ability to stimulate comb growth in capons or growth of seminal vesicles and prostate in spayed infantile rodents. Gynecogen is a collective term for all substances with ability to restore to some extent the female genital tract after castration atrophy or stimulate growth directly or induce or maintain the secondary sex characteristics of the female. Gynecogens are divided into two groups: (1) estrogens, substances which produce estrus in spayed rodents, and (2) progestogens, substances which have progestational activity. Table I gives their origin, chemical names and occurrence.

TABLE I

Type of hormone	Denoting gonadal origin of hormone	Chemical name **	Occurrence
ESTROGEN (Gynecogen) (Pro-female)	ESTRIN	ESTRADIOL Estrone * Estril	OVARY Urine Urine
PROGESTOGEN (Gynecogen) (Pro-pregnancy)	PROGESTIN	PROGESTERONE *	CORPUS LUTEUM
ANDROGEN (Pro-male)	ANDRIN	TESTOSTERONE Androsterone * Dehydroandrosterone	TESTIS Urine Urine

* International standard.

** Internationally used chemical nomenclature.

From this table it is seen that estrin refers to the estrogens of the ovary. Available for clinical use are estradiol (dihydroxyestrin), estrone (ketohydroxyestrin), estril (trihydroxyestrin) estradiol benzoate and dipropionate and emmenin.

Table II lists many of the commercial preparations.

TABLE II
Commercial Estrogenic Hormone Preparations

ESTRADIOL	Progynon D. H.	(Schering: tablets, suppositories, lanol)
	Ovocycin	(Ciba: tablets, suppositories, ointment)
	Dimenformon	(Roche-Organon: tablets)
ESTRONE	Amniotin	(Squibb: ampules, suppositories, capsules)
	Estrone	(Abbott: ampules)
	Estrone	(Lilly: ampules & suppositories)
	Theelin	(Parke, Davis: ampules)
ESTRIOL	Estril	(Abbott: capsules)
	Estril	(Lilly: capsules)
	Theelol	(Parke, Davis: capsules)
ESTRADIOL BENZOATE	Progynon B	(Schering: ampules)
	Ben ovocycin	(Ciba: ampules)
	Dimenformon Benzoate	(Roche-Organon: ampules)
ESTRADIOL DIPROPIONATE	Diovocycin	(Ciba: ampules)
ESTRIOL COMPLEX	Emmenin	(Ayerst, McKenna & Harrison: liquid and tablets)
PROGESTERONE	Progestin	(Lilly: ampules)
	Progestin	(Upjohn: ampules)
	Proluton	(Schering: ampules)
	Lipo-Lutin	(Parke, Davis: ampules)
	Luto-Cylin	(Ciba: ampules)

Confusion arises from the various designations of hormone content in the different commercial preparations. The Health Organization of the League of Nations has adopted standards per weight of crystalline hormone and a hormone ester as well as a standard for the promale and progestational hormone.

The international unit for each is given in Table III.

TABLE III
International Units

Estrone	0.0001 milligram
Estradiol benzoate	0.0001 milligram
Progesterone	1.0 milligram
Androsterone	0.1 milligram

Some preparations are available in rat units, some in international units and some in crystalline weight. On this basis, a wide discrepancy exists in the amount of hormone dosage. A rat unit is the smallest amount of estrogenic hormone which will induce estrus in a spayed rat. Roughly, one rat unit equals 5 international units. The potency of the individual estrogenic hormones varies considerably when the biologic activity is compared with equal weights of the pure crystalline hormone. One gm. of estradiol benzoate yields 6,000,000 R. U.; one gm. of estradiol 12,000,000 R. U.; and one gm. of estrone 1,000,000 R. U.

Since demonstration of the fact that the benzoic acid ester of estradiol is absorbed more slowly thus having a more prolonged therapeutic effect estradiol benzoate has been widely used. Estradiol dipropionate in animals has an even more prolonged action than any of the other estrogenic preparations.

From the foregoing summary the importance of a working knowledge of various units and action of these preparations from the standpoint of the patient's welfare needs no further emphasis. Another important phase in the subject is the matter of having a suitable yardstick to establish the clinical efficacy of these substances in the human. Excess gonadotropic hormone appears in the urine when there is estrin deficiency and disappears upon administration of adequate estrogenic dosages. However, assays of the urine require facilities of a biologic laboratory. This is also true for assays of the blood estrogenic content. Vaginal and endometrial biopsies are valuable. There are practical objections to these methods for every day office use.

Since the early 1920's smears of the vaginal secretions have been used in animal experimentation and their value widely attested by many different laboratories. However, it was not until 1935 when Papanicolaou and Shorr demonstrated the definite cytological changes in the human that we had a method for measuring the action of these substances which was available for general use. They showed that smears from a normal woman in the follicular or "copulative" phase exhibited a clear cut difference from smears of an ovariectomized or menopausal woman. Follicular phase smears show numerous squamous epithelial cells, largely cornified with small pyknotic nuclei.

Menopausal or ovarian ablation smears showed many leucocytes, a predominance of noncornified squamous cells with larger nuclei or compact cells derived from the deeper layers of the vaginal epithelium with large well preserved nuclei.

Furthermore, in 14 out of 15 women with estrin deficiency smears, by subcutaneous administration of estrogenic hormone in oil they were able to restore the vaginal smear picture to that of normal estrin sufficiency (follicular phase).

The amount used varied from 100 to 2,000 R. U. per day. The majority responding to 500 R. U. (2,500 I. U.) per day. They noted an improvement in subjective symptoms concomitant with changes in the smears. They did not get these specific cellular changes when the hormone was administered by mouth.

Salmon and Frank showed in a series of castrate and postmenopausal women that 40% gave an estrine deficiency smear, 30% showed gradations in the smear, and 30% showed follicular phase smear. Some of this last group showed

severe subjective symptoms in spite of the follicular phase smears. However, these as well as the other groups improved with adequate estrogenic therapy. This finding in the last 30% group of Salmon and Frank together with the failure of Papanicolaou and Shorr to get cytologic changes in those women treated with oral estrogens raises the question of whether our aim necessarily must be towards complete restoration of the follicular phase vaginal mucosa. For in spite of no cellular response after oral therapy, as indicated by vaginal smears, complete alleviation of subjective symptoms has been reported by many workers. Recently (1939) Papanicolaou, et al., reported detailed smear changes following the administration of male hormone (testosterone propionate) to a young woman in whom they inhibited the menstrual cycle. They demonstrated a transition of the vaginal cellular picture from that of the follicular phase to a complete menopausal smear. They offer this method as a reliable means of evaluating the androgenic hormone effect in women. This past year treatment of the menopausal syndrome solely with male hormone (testosterone propionate) has been reported by several men. Although their series are small all have reported uniform success in alleviating symptoms.

If then, androgen produces menopausal smear changes as indicated above, one questions again, Is our aim necessarily the leucopenic cornified epithelial smear? Be that as it may, the vaginal smear test is a valuable objective guide for the treatment of the climacteric syndrome with estrogens.

In conclusion, let us remember that estrogenic therapy for this syndrome is still empiric because of variation in individual response. It is pure replacement or substitution therapy. It may be necessary to use these substances a few weeks to years. There are advocates of relatively small unit dosage (Werner Schneider); on the other hand, there are many advocates of saturation with massive dosages (Kurzrok, Geist). Somewhere between these extremes is probably the correct stand. Although it should be emphasized that inadequate dosage is worse than none at all because of the discouragement to the patient.

Personally, I have had uniformly good results with bi-weekly subcutaneous injections of 5,000 to 10,000 I. U. for four to eight weeks gradually reducing the time intervals to ten to twelve days and finally placing the patient on oral therapy for maintenance dosage.

In summary an attempt has been made to clarify the confusion existing as to variety of unit dosage, commercial preparations and hormone content.

The value of the vaginal smear as an objective guide to treatment is emphasized.

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COMMUNIQUE

Feb. 3, 1941.

To the Editor:

I am in the army now and not behind the plow; so put me on the shelf till the battle is done and I can clean off my instruments and get back into harness again.

I am stationed at the Station Hospital, Camp Robinson, Arkansas. The orders read for a year and I still have 51 weeks to go. I am afraid that it will be longer before I get to put my carcass in anything but an army cot.

Best regards to the boys.

Your friend,

Wm. A. Snodgrass, Jr.

A BRIEF RESUME OF THE 1937 EPIDEMIC OF POLIOMYELITIS IN LITTLE ROCK, ARKANSAS, AND VICINITY

HOWARD SEYMOUR STERN, M. D.
Little Rock

During the months of July and August, 1937, there occurred in Arkansas, an exceptionally severe epidemic of poliomyelitis, of which 28 cases were treated at Little Rock General Hospital. Of these cases, fourteen were from Little Rock, and the remainder were, with one or two exceptions, from within a hundred mile radius of the city. Twenty-six cases were white and two were negroes. Thirteen were female and fifteen were males. Fifteen cases recovered from the acute stage, having residual paralyses varying from none to complete paralysis of all extremities. Thirteen deaths occurred, of whom seven were female, and six were males. Nine bodies were autopsied. Ages varied from three months to fifty-eight years. This last is the oldest case of poliomyelitis on record as far as we could determine.

Two of the patients had contact with known abortive cases, while others had contact with parents or friends who had colds, mild gastrointestinal and the like upsets. This concurs with Wickman (1) who showed that the disease is always spread from person to person, either by contact with patients or carriers.

All of the patients were in good health prior to infection, and in all of them the onset of the acute stage was quite sudden. A typical history, abstracted from all cases treated here, gives as prodromal symptoms, a mild attack of coryza, gastrointestinal upset, or merely malaise for a day or so which soon cleared up. Little attention was accorded these symptoms, and the patients were well for a few days until they were suddenly stricken with a severe headache, usually occipital. Fever was present in every case, varying from 100°-103°. Many cases had sore throats of varying degrees as their initial symptom, and four were seized out of a clear sky with paralysis of the throat and muscles of deglutition. Those who had more severe headaches vomited one or more times. Two cases started with severe abdominal pain in the lower right quadrant, and of these, one was admitted with a diagnosis of ruptured appendicitis. However, this soon subsided, and the disease ran its usual course. Other symptoms noted were diplopia, sweating, aphonia, anuria, pains in

various muscles, and stiffness in the back and neck.

On physical examination, one saw an apprehensive, very sick child lying quietly in bed. On being approached, the patient cringed as though even the thought of being touched was painful. The necks and backs presented varying degrees of inflexibility, and in several cases there was marked opisthotonus. Attempts at forcible flexion brought forth cries of pain and flexion of the knees and hips (Brudzinski's sign). A few cases presented nystagmus with the rapid components toward the affected (paralyzed) sides. Examination of the throats revealed nothing that could cause the symptoms of which the patients complained. Harbitz has examined throats of similar patients microscopically, and found no pathological lesion. Paralysis may be present at the onset of the acute stage, or develops in from one to five days. It may occur anywhere, may be ascending or descending, may involve spinal or cranial nerves, and will vary from complete loss of function to mere weakness in one or more groups of muscles. Reflexes are quite variable. The one that we found constantly present was Brudzinski's sign. Kernig's and Babinski's signs were positive in a large number of the cases. The abdominal signs were constantly absent, and were usually the first reflexes to go. Patellars, cremasterics, biceps and arm jerks were abnormal in various cases and in various combinations, depending on the locations of the lesions. The pulse rate in all cases was quite high, and continued so long after the temperature had returned to normal, probably due to paralysis of the vagus nerve.

Paralysis is either permanent or transient. If the latter, it may last for several days or a year or more, dependent on the amount of tissue damage. In one of our cases, there was complete paralysis of all the muscles of respiration, so we applied a lungmotor for four days, at the end of which time there was sufficient return of respiratory function to discontinue this measure. The patient is now alive and is gradually regaining the function of all his muscles, which at the time of his discharge from the hospital, were completely paralyzed.

The laboratory is of great value in confirming a diagnosis of poliomyelitis. Typical, though by no means specific blood counts give a picture somewhat as follows: Total white count runs from 10,000 to 18,000 cells per cubic millimeter with a polymorphonuclear count above seventy per cent. The urine gives little information in this disease, nor does other blood work. The

spinal fluid the first day or so may or may not contain globulin, but after that, it is constantly positive, and may persist so for as long as eight weeks into the recovery period. The spinal cell count varies from five to five hundred cells per cubic millimeter. Early in the disease, polymorphonuclear cells are predominant and later, as the course becomes chronic, lymphocytes take the upper hand. A low cell count usually indicated a more favorable outlook. Spinal puncture in poliomyelitis should be done only for diagnostic purposes, and as little fluid as is necessary should be drawn. This fact was brought home to us rather forcibly, when after a sudden death, autopsy revealed a marked coning of the cerebellum which was quite jammed into the foramen magnum. If pressure symptoms are present, concentrated glucose is just as efficient and far more safe.

We did not follow any definite plan of treatment with our patients. We tried everything. We found that the most important one factor in the treatment is REST . . . absolute and complete. To move a poliomyelitis victim in the acute stage is, in the great majority of cases, the signing of his death warrant. Wherever possible, these cases should be treated where they lie, and under no circumstances should they be transported from one town to another for hospitalization. A number of our patients who were doing fairly well at home, were brought many miles in automobiles to the hospital, and either arrived in coma, or went into a state of bulbar collapse soon after their arrival.

At the start of the epidemic, while awaiting a supply of convalescent serum, we gave intramuscular injections of parents' whole blood, in doses of 20-50 cc., three to four times a day. 2 cc. of one per cent sodium citrate solution was added to each 50 cc. of blood to prevent clotting in the syringe. This treatment was used merely as a stop-gap until the serum could be obtained. However, the two patients to whom it was given recovered and were discharged, even though their lesions were bulbar. The convalescent serum proved worthless in all cases in which it was used, and was discontinued. This finding is upheld by Aycock (2).

A supply of serum, allegedly specific for the pleomorphic streptococcus of Rosenow was obtained, and was administered to seven patients. Skin tests were run on nine cases, and three of them had a faint Fourchet Flush in ten minutes. All of the patients on whom the serum was used expired except one child who had no paralysis either before or after administration of the

serum, and who was not at any time, critically ill. Our conclusion regarding the use of this serum is unfavorable.

Two patients were given prontosil and expired soon after. About ten cases were given sulfanilamide by mouth in large doses with more favorable results. About 50% of these recovered.

In addition to the above measures, of course, supportive treatment was given. After a patient had been free of fever for one or two weeks, an orthopedic consultation was obtained, and ALL of the muscles that were paralyzed or showed any weakness were set at complete rest in plaster. Several of these have returned for follow-up, and we note with extreme pleasure, a gradual return to function.

Patients and relatives were surprisingly cooperative in granting post-mortem examination on the bodies of those who expired. Nine autopsies were done, three under such conditions that they were of diagnostic value only. The other six were done under more favorable conditions, and considerable study was possible.

There was, in all cases, a congestion of the entire central nervous system, sometimes marked and sometimes slight. Marked edema of the cord was constantly present, and in some cases it was extreme. Microscopically there were three types of lesions. They were:

1. Nerve cell degeneration of various degrees.
2. Diffuse infiltration and proliferation, consisting of polymorphonuclears, lymphocytes, monocytes and microglia. There were no plasma cells to be found, contrary to reports on the recent Winnipeg outbreak, which was more likely encephalitis than poliomyelitis.
3. There was a perivascular, round cell, lymphatic infiltration.

The above order is the sequence in which the changes are believed to have occurred. The second and third are the inflammatory and reparative changes that are generally believed to be dependent on the ganglion cell degeneration.

The lesions were found most intensely in the cord, especially in the anterior horn cells; and from the medulla upwards, nerve cell degeneration diminished in both intensity and frequency. The ganglion cell changes at higher levels were negligible, hence the last two changes may occur independently, but on this subject there is much controversy. To the ganglion cell de-

generation is due all of the permanent paralysis. The temporary paralysis is probably due to the edema.

In a careful study of the six brains that were recovered, there were no lesions to be found in any of the olfactory tracts, a condition which is in direct opposition to the teachings of Schultz (3) and his associates, who introduced the zinc sulfate spray for prophylaxis. In the brains, the following lesions were found:

1. Scattered lesions in the thalamus, especially in the medial nucleus.
2. Lesions in the red nucleus and in the substantia nigra.
3. Lesions around the aqueduct of Sylvius in the midbrain.
4. In the floor of the fourth ventricle in the pons.
5. In the medulla, the lesions were widely disseminated, similar to the cord.
6. There were even scattered areas of perivascular infiltration in the cerebral cortex, although these were very slight. The lesions as a whole were not very constant, nor were they always symmetrical.
7. There was a patchy sort of meningitis in all cases, involving the blood vessels and the pia. This was not diffuse.

In the remainder of the bodies there was evidence of a general toxemia: edema of the viscera, cloudy swelling, congestion, etc. In most cases the ileo-cecal lymph nodes were quite enlarged. In one case, the Peyer's patches of the ileum were the seat of an inflammatory infiltration as was the spleen. Several spleens were enlarged.

It is the general consensus of opinion, and this epidemic bears out, that the infection is neurotrophic and spreads through the nerve trunks. In the central nervous system, the spread is through the axones. Goodpasture (4) incriminates the ninth and tenth nerves. Haber (5) destroyed the olfactory bulbs of monkeys and then produced infection by inoculating the olfactory mucous membrane, the course of the infection probably being the fifth nerve which also supplies that area. Landsteiner (6) successfully inoculated the anterior chamber of the eye to produce the disease, and Vieuchange (7) inoculated the external auditory canal with equal success. Wickman, Landon and Smith, and others (1) state that the disease is at some time during its course, carried by the blood and lymphatic streams.

As for infection through the gastro-intestinal tract, Flexner (8) states that this tract is innocent, and Levaditi (9) says that infection may be produced through this channel. Both present good material to support their respective views.

Conclusions

1. Since the work of Wickman, there is no doubt but that poliomyelitis is spread from person to person, either through patients or carriers.

2. In caring for poliomyelitis patients, absolute rest is of supreme importance, both during the acute and chronic stages, and hence, every paralyzed muscle must be put at rest in a cast.

3. Post-mortem findings were those of poliomyelitis alone, and if the epidemic was complicated with encephalitis or choreomeningitis, these conditions were negligible.

4. The most important item in the prevention of poliomyelitis is quarantine and isolation of carriers and patients, nose sprays being of little or no value for this purpose.

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COMING MEDICAL MEETINGS

- New Orleans Graduate Medical Assembly, New Orleans, March 3rd-6th, 1941.
 Arkansas Medical Society, Little Rock, April 14-16th, 1941.
 American Medical Association, Cleveland, June 2-6th, 1941.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith, and A. S. Buchanan.

The 16th annual session of the Arkansas Medical Society was held in Hot Springs, April 29 and 30, 1891, the president being Dr. J. A. Dibrell, Jr., of Little Rock. Among the original communications read at the meeting was a case of successful deligation of the left sub-clavian artery for aneurism of the axillary artery by Dr. J. A. Dibrell, Jr.

The past legislature had passed an act to prevent unprofessional conduct in the practice of medicine, which provided, that under certain conditions, the license of any physician may be revoked. Said unprofessional conduct consisted of abetting and aiding in criminal abortion, employing drummers and subsidizing hotels and boarding houses and also obtaining a fee on the assurance that a manifestly incurable disease could be cured permanently, the willfully betraying of professional secrets, advertising of medical business in which untruthful and improbable statements were made, conviction of any offense involving moral turpitude and habitual drunkenness.

Some interesting communications read before the section on the practice of medicine included a case of tumor of the cerebellum by Dr. J. S. Shibley, of Paris.

The 17th annual session of the Arkansas Medical Society was held in Little Rock, June 2 and 3, 1892, the president being Dr. J. S. Shibley, of Paris. An effort was made at this meeting to secure the meeting of the A. M. A. in Hot Springs, it never having met in Arkansas. The invitation was accepted temporarily by the A. M. A. and finally reconsidered, taking the meeting of the Association to Detroit, much to the disappointment of our delegates. The com-

EDITORIAL NOTE: This is the third installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

mittee on medical legislation was ordered to endeavor to secure a new medical law at the next legislature. The Society elected for the ensuing year Dr. J. T. Jelks, of Hot Springs, as president of the Arkansas Medical Society, and Batesville as the next place of meeting.

There was appointed at this time as a committee on medical legislation: Drs. R. G. Jennings, P. O. Hooper, J. S. Shibley, W. G. Lawrence. This committee evidently succeeded in securing a law governing the practice of medicine in Arkansas. Section of Act passed by the legislature of 1893 reads as follows:

"The party or parties so desiring to engage in the practice of medicine or surgery, as above indicated, shall be of good moral character, twenty-one years of age, and a graduate of some reputable college of medicine and surgery that requires not less than two courses of lectures, each course in a different year as the requirements for graduation.

"Before anyone shall engage in the practice of medicine and surgery in this state, they, possessing the qualification as above required, shall exhibit their diploma to some county clerk of the state, and have the same recorded in a book kept for that purpose, for which service the clerk shall receive a fee of \$1.50. The clerk shall also give the physician a certificate of record with the seal of the county attached thereto, which certificate may be attached to said diploma, for which service the clerk shall receive no fee.

"In all cases of doubt as to the respectability of the college issuing the diploma, it shall be the duty of the clerk of the County Court where said diploma is offered to be recorded to make inquiry of the Secretary of State where said college exists, as to its reputability and requirements for graduation and if the said clerk of the court shall find that the said college does not conform to the requirements of this act for graduates of medicine and surgery, then, and in that case he shall not record said diploma and the person holding it shall not be allowed to practice in this State."

The usual statement is contained that nothing in this act shall be so construed as to affect the status of any physician or surgeon now practicing in this state by virtue of a license obtained from any medical examining board in this state.

The 18th annual session of the Arkansas Medical Society was held in Batesville, May 31, June 1 and 2, 1893. The meeting was called to order by Dr. J. T. Jelks, president. His annual address proved to be of great interest, "The Antiquity of Syphilis: Moses as a Health Officer." There was no one more qualified to speak on this subject than Dr. Jelks, no more learned practitioner, especially on that subject, in Arkansas.

The writer recalls with much interest and pleasure this meeting at Batesville. This attractive little town situated in the Ozarks on the beautiful White River turned out its citizens to welcome the Arkansas Medical Society. While the at-

tendance was not so large as some of the previous meetings, interest was manifest in the scientific discussions and the session terminated with a boat ride upon the White River. Dr. D. C. Ewing, of Pine Bluff, was elected president at this time, and Pine Bluff was chosen as the next place of meeting.

The 19th annual session of the Arkansas Medical Society was held in Pine Bluff, May 23, 24, and 25, 1894, in the Merrill Institute Lecture Hall, and the meeting was called to order by Dr. D. C. Ewing, president, with the usual number of delegates and members present. The report of Dr. R. G. Jennings, chairman of the committee on medical legislation, expressed guarded approval of the law enacted by the legislature of 1893. His report elicited prolonged discussions on the part of delegates and members and was referred back to the legislative committee for further consideration and further report.

Dr. Keller, of Hot Springs, introduced the following resolution:

"Resolved, That the delegates from the Arkansas Medical Society to the A. M. A., which meets in San Francisco, be, and are hereby, instructed to oppose any revision or change in the code of ethics."

This resolution was put to a vote and lost. Then Dr. Keller introduced the following resolution:

"Resolved, That the committee on medical legislation be, and is hereby, instructed to take such steps and use such efforts with the approaching legislature as it may deem necessary to change the existing law or custom which gives to the governor and county judges and boards of trustees or commissioners of state institutions the power to appoint medical officers to such positions, so as to give that power to said governor and commissioners only on the recommendation of the Arkansas Medical Society through the State Board of Health, which board shall be appointed only upon recommendation of said Society."

After considerable discussion the resolution was lost.

The Society chose as its next president Dr. R. C. Jordan, of Pine Bluff, and Little Rock as its next meeting place. There appear as members of the committee on medical legislation for the ensuing year, 1895: Doctors J. H. Southall, chairman; L. R. Stark, L. P. Gibson, H. P. Collings, of Hot Springs; and W. W. Hipolite, of DeValls Bluff.

1895 proved to be a disastrous year for this committee in that the law regulating the practice of medicine passed by the legislature of 1893 was repealed, and the old law providing for county boards of medical examiners, three to

each county in the state, was re-enacted, making 225 medical examiners for the state of Arkansas. Mr. Clement who was active in securing the repeal of the law of 1893 stated in his remarks that some of the biggest fools as doctors he had ever known had two or three medical diplomas. He thought the doctor who could not write his name must be more able to practice medicine than the gentleman from Baxter is to practice law. On roll call the vote was 40 ayes and 20 nays. The bill, therefore, passed.

The 20th annual meeting of the Arkansas Medical Society was held in Little Rock, May 1, 2 and 3, 1895. At this meeting Dr. L. P. Gibson resigned as secretary of the Arkansas Medical Society after years of useful service. The meeting was addressed by Rev. Sam Jones, who at that time was conducting a revival meeting in Little Rock. Dr. L. P. Gibson was elected president and the place of meeting next selected was Fort Smith.

A new constitution was adopted at this meeting. Section 2, article 1, contained this statement: "All members in good standing in the auxiliary county societies may become members in all its rights and privileges, by an application accompanied by a certificate of good standing in the county society, signed by the president and secretary of the county society." Article 5 is: "The initiation fee of this society shall be \$5.00, and the annual dues \$3.00. Members of the county societies in good standing at the time of the adoption of this constitution shall not be required to pay the initiation fee."

This provision made the county societies the judge of qualifications of members in the state society and relieved the committee on credentials from a great deal of work. Consideration of the veto of Governor Clark of the recent repeal bill, which did away with the medical law after only two years of trial, was commended by the society. The fact that the legislature passed the law with the Governor's veto was discussed.

During this year the City Hospital was established in Little Rock, provided by the bequest in the will of Colonel Logan H. Roots for \$10,000.00, the original provision in the will having been \$25,000.00. Owing to defect in the will it was only possible to collect by compromise measure \$10,000.00. From other sources of revenue provided by the city the hospital was established.

The 21st annual session of the Arkansas Medical Society was held in Fort Smith on April 29 and 30, and May 1, 1896. The meeting was

called to order at 11:30 by the president, Dr. L. P. Gibson. The Benton County Society delegates were admitted after protest had been made by one of the members of the society as to the method of electing the delegates. There was the usual discussion as to medical legislation and a number of interesting scientific papers were read and discussed. Receptions were held at the residences of Mrs. DuVal, Drs. Johnson and Bailey. New officers were elected for 1896-1897: President, J. A. Vance, of Harrison; and the place of meeting selected was Little Rock.

The twenty-second annual meeting of the Arkansas Medical Society was held in Little Rock in the Knights of Pythias' Hall, May 11, 12, and 13, 1897. The usual place of meeting, the old Senate Chamber of the State House, was occupied at that time by the legislature.

The meeting was called to order by President A. J. Vance, of Harrison, Arkansas. There were the usual committee reports and the annual address of the president. The principal matter discussed in the meeting was the resignation of Dr. L. P. Gibson as editor of the Journal of the Arkansas Medical Society. After much discussion the journal was discontinued, the last publication being the May issue. Its place was to be taken by a bulletin, said bulletin to contain only the news and announcements of the Society, and not to publish its proceedings and papers.

Pulaski County Medical Society acted as host and ended the meeting with the usual banquet at the Knights of Pythias' Hall. Dr. J. G. Eberle, of Fort Smith, was elected president for the ensuing year and the place of meeting chosen was Eureka Springs, Arkansas.

The April number of the Journal contained the obituary notice of Dr. J. A. Dibrell, Sr. Dr. Dibrell's death occurred on February 23, 1897. He was born in Nashville, Tennessee, August 15, 1817.

The 23rd annual session of the Arkansas Medical Society was held in Eureka Springs at the Masonic Temple, May 11, 12, and 13, 1898. The meeting was called to order by the president, Dr. J. G. Eberle, of Fort Smith. Climatic conditions had prevented the attendance from certain portions of the state at this meeting. It was impossible to cross the Arkansas River at Fort Smith on account of high water, which was present in all the rivers of the state. Some of the members, therefore, were late in arriving and some officers were unable to attend. The meet-

ing, however, was a most interesting one and there were visitors from St. Louis in the person of Dr. I. N. Love and Dr. James Moores Ball. Reports of various committees were made and after the report of the committee on medical legislation, Dr. W. B. Welch, of Fayetteville, on account of failure of the committee on legislation, moved to abolish said committee. This motion was advocated and sustained by Dr. Welch in a very splendid manner. Only three votes were obtained, however, for the abolition of the committee on medical legislation. The committee was, therefore, continued. Dr. J. W. Hayes, of Eureka Springs, was elected president.

The 24th annual session was held in Little Rock, May 10, 11, and 12, 1899. The meeting was called to order by the president, Dr. J. W. Hayes. Dr. R. B. Christian, chairman of the committee on necrology, reported the death of four of the members of the society, namely, Dr. D. C. Ewing, ex-president of the Arkansas Medical Society; Dr. C. S. Gray, of Little Rock, specialist in eye, ear, nose and throat; Dr. P. H. Pendleton, of Pine Bluff; and Dr. R. G. Jennings, of Little Rock. All of these gentlemen had been prominent and useful members of the medical society for many years. The session was honored by the presence of Dr. J. F. Lydston, who was made honorary member of the Arkansas Medical Society. Dr. J. H. Lenow, former treasurer of the Society, endeavored to secure the appointment of a committee to get rid of the non-paying members of the state medical society, who he claimed had become a burden upon the Society. The matter was discussed at length and Dr. Lenow's motion to appoint this committee to drop these members lost. Dr. Claibourne Watkins, of Little Rock, was elected president, and the place of the next meeting selected was Jonesboro.

About six weeks before the time selected for the meeting at Jonesboro, the secretary addressed a letter to the committee on arrangements of the County Medical Society of Craighead county at Jonesboro, it was discovered that the invitation had been extended to the Arkansas Medical Society to meet at Jonesboro and no report had been made by the individual extending the invitation. There was some embarrassment at first, which was finally relieved by the outbreak of small pox in Jonesboro, which resulted in a quarantine of that city against all portions of the state and made the meeting there impossible. The profession of Fayetteville rallied to the emergency and at a call meeting extended an invitation to the Society to meet

there, which invitation was accepted and resulted in the Fayetteville meeting, May 15, 16, and 17, 1900.

The 25th annual session was called to order by the president, Dr. Claibourne Watkins, at Fayetteville, in the Knights of Pythias' Hall, at 10:00 a. m., May 15, 1900. In the president's address we find the statement that the Arkansas Medical Society "Like the people in Boccacio's narrative, we have literally 'fled from the plague' to hold this, our annual meeting, under the classic shades of Fayetteville, the Athens of Arkansas." Dr. Watkins' further remarks were addressed to a consideration of the small pox throughout the ages.

The Society was invited by the committee on arrangements to visit the University and were entertained by President Buchanan at that time and were given a reception by Dr. J. L. Buchanan at his residence.

The committee on medical legislation made its report, and Dr. W. B. Welch introduced a resolution to abolish the committee on medical legislation, stating that the legislature had refused on every possible occasion to listen to the advice of the committee on medical legislation, that it was believed by everyone who had the opportunity to become familiar with the legislative situation that nothing could be achieved by further contacting this body, stating that in the efforts to secure a good medical law you might as well bay the moon. This motion made by Dr. Welch after a most extensive and impassioned discussion by many members was finally lost.

Report was made of the death of Dr. D. A. Linthicum, of Helena, a member whose influence in medicine in Arkansas had been conscientious and efficient.

The nominating committee presented the name of Dr. W. B. Lawrence, of Batesville, as the next president of the Arkansas Medical Society. Dr. Lawrence was unanimously elected.

The 26th annual session of the Arkansas Medical Society was held in Hot Springs, May 14, 15, and 16, 1901. Dr. W. B. Lawrence called the meeting to order at the Eastman Hotel. Dr. Randolph Brunson delivered the address of welcome. Response from the Society was made by Dr. L. P. Gibson, of Little Rock.

As usual the committee on medical legislation occupied the time of the society and resulted in a prolonged discussion. Various suggestions were made as to the best method of passing a medical law in the legislature. Dr. C. R. Shinault, of Helena, advised some radical methods, which

did not meet the approval of the Society. The matter was left in abeyance and the methods to be used were entirely a matter to be decided by the committee on legislation.

Dr. Frank Vinsonhaler, of Little Rock, was elected president, and the next place of meeting selected was Little Rock.

The 27th annual convention of the Arkansas Medical Society met in the Hall of Representatives in the State House in Little Rock, May 13, 1902, and was called to order by Dr. F. Vinsonhaler, president. The committee on arrangements stated that a tally-ho drive would be given for the visiting ladies. Members of the Arkansas Medical Society were invited to a reception given by Dr. and Mrs. Edwin Bentley and Dr. Carle E. Bentley at their residence, 13th and McAlmont streets, on the evening of May 13, and a reception given by the president, Dr. Frank Vinsonhaler, 512 East Ninth street, on the evening of May 14. The annual banquet was given at the Albert Pike Cathedral the following evening. At this meeting a uniform constitution and by-laws recommended by the American Medical Association for all state societies were a matter for consideration by the state Society. It was, after some changes were made, adopted by the state Society and still is in force in the government of our state Society. It was the first one to provide for 10 councillor districts, each having a councillor who would manage the business affairs of the medical society. The report of the committee on medical legislation was a most important one and finally led to the passage of the present medical law. Under the advice of and with the assistance of Dr. I. J. Newton, formerly of Monroe, Louisiana, the three board system was recommended, adopted and afterwards passed by the legislature and has been the law in our state ever since.

The committee on necrology reported the death of Dr. J. H. Southall, of Little Rock, a man who had perhaps done more for medical legislation than any other member of the state Society. Dr. Southall had been for years a teacher in the School of Medicine, first in physiology and later the practice of medicine. He had a distinguished army record, having been a member of the 55th Regiment of Virginia Infantry and in all of the battles in which the army of Northern Virginia was engaged. He was a very gallant gentleman and much beloved by the profession.

The 28th annual session of the Arkansas Medical Society was held April 30, May 1, and 2, 1903, in Jonesboro. The president, Dr. C. R.

Shinault, called the meeting to order. The meeting was held in the Malone Theatre. It was considered a great pleasure to be able to meet in Jonesboro, after having failed to meet there once before on account of small pox. The profession and people of Jonesboro seemed to feel an especial urge to make our stay at Jonesboro pleasant as well as profitable. There were a number of distinguished visitors present from St. Louis, Kansas City and other places. The feature of the meeting was the presence of Dr. J. M. McCormack, representative of the American Medical Association, who was there in the interest of a decided innovation recommended by the national association. Dr. McCormack addressed the meeting at some length and the recommendations which he urged upon the Society were afterwards adopted in making the county unit supreme and the judge not only of the qualifications of the medical society but also of the members of the American Medical Association, something that never before had been possible. He also urged a greater degree of leniency in our relations with eclectics and homeopaths, thinking that the simplest way to meet these cults was the one of kindness and cooperation, even urging consultation with them, which had not been the method followed by the medical profession. Dr. McCormack was an interesting and colorful figure and his visit to the different states, including every state, I believe, in the union, resulted in the recommendation which he urged at Jonesboro being adopted finally in every state.

Dr. Shinault in his address called attention to the adoption of a new constitution and by-laws, heartily recommended it and believed it to have resulted already in the improvement in our membership. He spoke at length of the passage of the new medical law by the preceding legislature establishing medical examiners for the regular, eclectic and homeopath medical practitioners of Arkansas, each board to consist of seven members, one being appointed from each congressional district. This law secured by a committee composed of Drs. Shinault, Runyan, Newton, Norwood and E. R. Dibrell, attended of course, by the united efforts of the medical profession of the state, resulted in our being able to put behind us the disgrace of the old county board law and opening up a brighter prospect for organized medicine in Arkansas. These gentlemen should be remembered by the profession with a feeling of gratitude for their efforts in obtaining this law.

(To be Continued)

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

IMPORTANCE OF THE TUBERCULIN TEST

METHODS for finding cases of tuberculosis have not yet been reduced to a standardized pattern. Experience has prompted certain changes and practical considerations make it necessary to eliminate wasteful methods. Pressed by the need for economy some workers now place almost sole reliance on the X-ray and seem ready to discard the tuberculin test as a selective screen. Among those who feel that the tuberculin test is still of great importance is J. Arthur Myers. In his paper "Tuberculosis in Students" he delineates a conception of tuberculosis which some may not accept in practice but which furnishes food for thought. Space permits here only an abstract of the discussion on the tuberculin test.

Ten years ago to say a student had tuberculosis really meant that he had consumption. It was the tuberculosis diagnosed by the ancient Chinese, Babylonians, Greeks and all since their time. A more recent and more logical conception of tuberculosis is that it begins when the first neutrophile phagocytoses a tubercle bacillus and the outcome depends upon subsequent physiologic events. From three to seven weeks after tubercle formation begins, the tissues are sensitized to the protein fraction of the tubercle bacillus and apparently remain so as long as tubercle bacilli are alive in the body. This sensitivity is determined by the tuberculin test. The tubercles may be microscopic in size and there is no way of determining in a given individual whether clinical tuberculosis will ever make its appearance. Since the body is seeded with tubercle bacilli, clinical lesions may appear at any time and in almost any place. Therefore, all who react to tuberculin have tuberculosis.

The acceptance of this conception is imperative, says the author, because it is the only conception that will lead us to the control of the disease. Normal appearance and normal X-ray shadows in a positive reactor, do not justify us in looking lightly upon the condition. Inspection of the chest does not include all of the lung and some lesions may be too small to cast shadows. Moreover, clinical tuberculous lesions may develop in many parts of the body other than the lung.

"Even if we could be certain that in the tuberculin reactors there are at the moment no lesions

except those of the primary complexes, we have no way of determining what minute acute or chronic clinical lesions will develop or where they will be located. The reactor whose complete examination is negative today may have tuberculosis meningitis, miliary disease, tuberculous pneumonia, peritonitis, pleurisy with effusion or synovitis, tomorrow."

Chronic clinical tuberculosis is essentially a disease of adults—it only begins to get into its stride in the college and university age period. Therefore, we find only a small percentage of tuberculin reactors with chronic, clinical tuberculous lesions during their few student years, yet it is of great importance that their disease be detected before it becomes contagious.

"Occasionally one asks why it would not be better to omit the tuberculin test and proceed directly to the X-ray film inspection of the chest, since the occasional person has spoken of this inspection as the best case-finding method. No student of tuberculosis could be satisfied with such a procedure because the X-ray film examination is totally inadequate in determining the true tuberculosis situation in any student body. Such examination is limited to a small part of the body; indeed, it does not include more than 75 per cent of the lungs themselves. Moreover, it reveals evidence only of gross lesions and does not differentiate these with reference to etiology, tuberculous or nontuberculous. We divide pathology into gross and microscopical for teaching and practical purposes. The X-ray reveals only the gross. For example, among those who have

primary tuberculosis complexes in the body, the X-ray film of the chest reveals evidence of their presence in only approximately 10 to 15 per cent. The student of tuberculosis demands something far more delicate than the X-ray film and he finds it in the tuberculin test.

"It would be as futile to try to control tuberculosis without the tuberculin test as to try to control syphilis without the Wassermann or an equally good test. At the University of Minnesota we have in the neighborhood of 4,500 entering students each year and the tuberculin test indicates that approximately 1,000 of them have the first-infection type of tuberculosis somewhere in their bodies; that is, primary tuberculosis complexes have been established, and to us the tuberculin reaction means that living tubercle bacilli are present. Among our reactors, only 100 to 150 present any evidence that might be interpreted as representing the primary tuberculosis complex on the X-ray film of the chest. Of the entire 1,000, rarely more than 10 to 15 have, at the moment, lesions in the lungs which cast shadows that might be due to the clinical form of pulmonary tuberculosis. Thus, if we depended entirely on the X-ray film examination, we would overlook 85 per cent or more of the students who actually have tuberculous lesions in their bodies. Each of the 1,000 students who reacts to the tuberculin test is a potential clinical case of tuberculosis some time in life and in the occasional one this form of the disease will actually occur while in school. Therefore, we feel that this group of 1,000 students should be listed and observed from year to year for clinical tuberculosis, just as one lists those who have not been immunized against small pox or diphtheria as the susceptibles in case of an outbreak of one of these diseases on the campus."

Experience in eradicating tuberculosis in cattle justifies our faith in the tuberculin test. "The veterinarians of this country have made more than 217,000,000 tuberculin tests on cattle between 1917 and 1939. The carcasses of more than 3,700,000 reactors were examined post-mortem, and the accuracy with which the test selected those with tuberculous lesions was little short of miraculous. Indeed, it was only through the tuberculin test as the detective that tuberculosis has been almost eradicated from the cattle herds of this nation."

Of course no tuberculosis program is complete that stops with the tuberculin test. Reactors should have a chest X-ray examination, preferably by film inspection, though the fluoroscope in the hands of an expert may equal the film inspection.

Those students with shadows of lesions must be examined in considerable detail and in those with shadows that persist, laboratory examinations, including the search for tubercle bacilli in the gastric contents, must be made.

In answer to the question: "Must students contract tuberculosis while in college?" the author answers: "No, because we have at our command accurate methods of screening out contagious cases of tuberculosis in any group. Therefore, if we keep students under sufficiently close observation, it is with great rarity that one will enter with contagious disease or will develop it on the campus so as to disseminate it to other students. Thus, the students may be prevented from contracting tuberculosis from one another. . . . It is true that the occasional student will become infected through contact with a contagious case entirely apart from the campus. However, in most parts of this country such infections have been reduced to one per cent or less per year. Therefore, few students become infected even in this manner while they are in college."

Tuberculosis in Students by J. Arthur Myers, M. D.,
Amer. Rev. of Tuber., February, 1941.

COMMUNIQUE

Feb. 17, 1941.

To the Editor:

Thanks for the 1941 Medical Society card. It was indeed a pleasant surprise to receive it. I would appreciate having *The Journal* sent to the address given below. Fort Snelling, where I am assigned as Specialist in Eye, Ear, Nose and Throat, is one of the main reception and induction centers of the northwest. This army post has a personnel of approximately 2,500 officers and men. It is estimated that about 5,000 officers and men will come to this station for examination and assignment during February and March. These men will be assigned to various camps throughout the United States. Mrs. Johnson and I miss our friends in Fort Smith and are looking forward to the time when we can return. Regards and best wishes.

J. D. Johnson,
Captain, M. C.,
Station Hospital
Fort Snelling, Minnesota.

THE JOURNAL

OF THE

ARKANSAS MEDICAL SOCIETY

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W. R. BROOKSHER, M. D., Editor

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COMMITTEES ON MEDICAL PREPAREDNESS

County medical societies are slow in making reports on the medical man-power in their respective counties as has been requested by the Federal government through committees on medical preparedness. These committees have a most important and vital part in plans for medical defense. It is their responsibility to see that sufficient physicians enter military service to care for the needs of the armed forces while, at the same time, making provision so that the ordinary civilian and industrial medical needs of the county will not be neglected. It is contemplated that increments to the military medical forces will be made on a quota basis and it will become the function of the county committees to make decision as to who can be spared and who should remain in the county. For this reason, it is most important that our committees immediately canvass the situation in each county, tabulate the data, and place it in readiness for such calls as may be made in the future.

EDITORIAL COMMENT

HOTEL RESERVATIONS FOR THE ANNUAL SESSION

The Annual Session of the Society will be held in the Marion Hotel, Little Rock, April 14th, 15th and 16th. Because of military activity at Camp Robinson, Little Rock hotels are having increased business and frequently have capacity registration. Members planning to attend the 1941 annual session are urged to make reservations well in advance for the accommodations they desire. There is no better time to make such reservations than today.

COMMUNIQUE

Fort Bliss, Texas.

February 2, 1941.

To the Editor:

To begin with I am just recovering from a week-end fraught with momentous happenings. In addition to President Roosevelt having a birthday on January 30th, a grandson was born to me in Little Rock; also on the same 30th I reached my 51st year. So you can readily see why it was necessary for the commanding officer to throw a guard around me to prevent my journeying to Juarez and drinking various toasts of tequila in celebration of all three events.

There is a marked contrast in army life of today and that which characterized the mobilization of 1918. Imagine tents all heated with gas and electricity (even a wall socket for radio, electric razor or possibly an electric vibrator to massage our precious bodies). Shades of the old Sibley stove, etc. Latrines are within a few feet of every man's tent and are as modern as any private home. Food is served out of china dishes in modernly-equipped mess halls with gas ranges that would be the envy of a Waldorf Astoria chef. Food is in abundance as well as studied variety. Hell, if this is war, let them make the most of it. The men are not clothed in any old garment that some callous supply sergeant might toss at them, but are carefully measured for comfortable uniforms. It is my understanding that ere long each can go to his private tailor for fittings. The camp site is carefully chosen as to drainage, etc., and we have none of the engineer's nightmares such as Camp Funston was in 1917, when mud was knee deep.

Truly, Uncle Sam is literally doing all that a fond parent can do to keep up high morals in raising our greatest army. From my observation Herr Hitler is going to face one of the best-trained, best-equipped, fightingest body of troops ever assembled under one flag.

Yours

Stanley M. Gatés.

PROCEEDINGS OF SOCIETIES

Carroll County Medical Society has elected the following officers: President, D. K. McCurry, Green Forest; Vice-President, W. A. Butt, Green Forest; Secretary-Treasurer, A. L. Carter, Berryville, and Delegate, D. K. McCurry.

The Hempstead County Medical Society and Auxiliary honored Dr. and Mrs. J. W. Branch, Hope, with a dinner January 23rd.

The Mississippi County Medical Society was addressed February 5th by T. F. Hudson, Luxora, "Origin, History, and Need of National Physicians' Committee"; Tom Mitchell, Memphis, "Some Observations on Pneumonia in Children," and Carl Sanders, Memphis, "Toxic Goitre: Its Effects on the Heart."

F. D. Smith, Secretary.

Clay County Medical Society has elected the following officers: President, W. J. Blackwood, Rector; Vice-President, W. E. Turner, Jr., Piggott; Secretary-Treasurer, J. E. McGuire, Piggott; Delegate, F. H. Jones, Piggott, and Alternate, W. E. Turner, Jr.

The Ouachita County Medical Society met in regular monthly session at the Camden Hospital, February 6th. A dinner session was held with the following program: "Cancer of the Cervix," Fred Hames, Pine Bluff; "Scarlet Fever," John Wilson, Magnolia, and "Newer Methods in the Treatment of Gonorrhea," Allen Russell, Pine Bluff.

R. B. Robins, Secretary.

Montgomery County Medical Society has elected the following officers: President, J. B. Steuart, Norman; Vice-President, G. E. Watkins, Mount Ida; Secretary-Treasurer, J. H. McLean, Caddo Gap; Delegate, J. B. Steuart, and Alternate, G. E. Watkins.

The Benton County Medical Society met at Siloam Springs, February 13th for the following program: "Urology in General Practice," Chas. Paddock, Fayetteville.

M. W. Chastain, Secretary.

The Southeast Arkansas Medical Society met as guests of the Lake Village physicians on February 17th, 28 physicians and 17 members of the Auxiliary being present for the dinner. M. J. Kilbury, Little Rock, gave a lantern slide demonstration on anemias and S. C. Fulmer, Little Rock, discussed nephritis.

S. W. Douglas, Reporter.

The Alumni Association of the University of Arkansas School of Medicine will hold its annual banquet at the Albert Pike Hotel, Little Rock, April 14th at 7:00 P. M.

The Lawrence County Medical Society met with J. L. Merrell at Walnut Ridge February 11th. Dr. Merrell read a paper on "Gallbladder Disease." Following the scientific program members and visitors were guests of Dr. and Mrs. Merrell at dinner.

J. B. Elders, Secretary.

The Sebastian County Medical Society was addressed February 11th by C. H. Finney, "Tick Borne Diseases."

W. F. Adams, Secretary.

The Independence County Medical Society was addressed at its dinner session February 10th by Ralph E. Weddington on "The Significance of the Patch Test." The Society again voted its disapproval of the FSA plan of medical care but plans to take under consideration the NYA health project.

W. J. Ketz, Secretary.

The Pope-Yell County Medical Society was addressed February 13th by W. F. Adams, Fort Smith, "Gynecological Conditions Necessitating Emergency Laparotomy."

Drew County Medical Society has elected the following officers: President, J. S. Wilson, Monticello; Vice-president, R. D. Dickens, Monticello; Secretary-treasurer, J. P. Price, Monticello; Delegate, R. D. Dickens, and Alternate, J. P. Price.

PERSONALS AND NEWS ITEMS

F. E. Baker has been elected vice-president of the Bodcaw Bank at Stamps.

James W. Branch, Hope, has been ordered to active duty with the Army Medical Corps and assigned to Station Hospital, Fort Knox, Kentucky.

W. A. Snodgrass, Jr., formerly of Pine Bluff, has entered active military service and is stationed at the Station Hospital, Camp Robinson.

Capt. O. G. Hirst, formerly stationed at Carlisle Barracks, Pennsylvania, has been transferred to Fort Meade, Maryland.

Lt. E. J. Ritchie, formerly stationed at Carlisle Barracks, Pennsylvania, has been transferred to Camp Grant, Illinois.

Lt. H. D. Fowler, formerly stationed at Carlisle Barracks, Pennsylvania, has been transferred to Camp Grant, Illinois.

S. J. Wolfermann, Fort Smith, has been elected a director of the Hospital for Crippled Adults, Memphis.

Dr. and Mrs. W. L. Brittain and Dr. Ruth Brittain, Conway, spent a recent vacation in New Orleans and on the Gulf Coast.

"Oxygen Ventilation in the Treatment of Bladder Tuberculosis," by Wesley J. Ketz, Batesville, appeared in the August issue of the American Journal of Surgery.

Vann C. Binns, formerly of Pine Bluff, is now on duty with the First Medical Squadron, Fort Bliss, Texas, as Captain, Medical Corps.

A. B. Tate, formerly of Augusta, has been assigned as medical director at Clarksville.

J. F. Hayes, formerly of Russellville, has been assigned as health director at Augusta.

Joe F. Rushton has been elected a director of the Citizen's Bank at Magnolia.

Richard W. Miller has been appointed physician at the University of Arkansas, Fayetteville.

Jerome S. Levy, Little Rock, has been elected an associate fellow of the American College of Physicians.

"Housing of Health Departments," by W. B. Grayson, Little Rock, appeared in the February issue of the Southern Medical Journal.

Chas. S. Holt, Fort Smith, is spending a March vacation in Florida.

L. J. Harrell has moved into new offices at Prescott.

Theo Freedman, Little Rock, addressed the Hot Springs chapter of DeMolay recently on "DeMolay in Arkansas."

B. P. Briggs, Little Rock, has been elected a fellow of the American Academy of Pediatrics.

Capt. Wm. H. Newkirk, Camp Robinson, has been elected vice-president of the Little Rock Military Club.

S. W. Douglas, Eudora, addressed the Greenwood, Mississippi Kiwanis Club recently on the subject: "Caution—Slow Down!"

C. H. Lutterloh, Hot Springs National Park, and F. H. Jones, Piggott, have been elected president and Arkansas vice-president, respectively, of the Mid-South Postgraduate Medical Assembly.

J. B. Jameson and R. B. Robins have been elected directors of the Camden Chamber of Commerce.

Hoyt R. Allen, Little Rock, attended the recent meeting of the Mid-West Proctologic Society in Saint Louis.

Miles F. Kelly has completed the course at the Medical Field Service School, Carlisle Barracks, Pennsylvania, and has been promoted to the rank of captain. He is now assigned at Camp Grant, Illinois.

J. B. Jackson and Max Hughes, Walnut Ridge, have been called to active service in the army medical corps and assigned as lieutenants to the 66th Motorized Division, Fort Benning, Georgia.

B. E. Hendrix, Gillham, has been elected president of the Bank of Horatio for the 35th consecutive term.

MARRIED—On January 1st, W. J. B. Williams, Des Arc, and Miss Lorene Kloss, Beebe.

OBITUARY

HENRY HERBERT DARNALL, age 61 years, Fulton, died February 11th. Formerly of Louisiana, he first located at Columbus, but for many years had practiced at Fulton. Surviving relatives are his wife and two daughters.

THREE QUARTERS OF A CENTURY FOR PARKE, DAVIS & COMPANY

The year 1941 marks the Diamond Anniversary of the founding of Parke, Davis & Company, a firm which had its inception in a small drug store in the city of Detroit, Michigan, and which, during the past seventy-five years, has become the world's largest makers of pharmaceutical and biological products.

From the very beginning, back in 1866, Parke, Davis & Company has engaged in research work with the object of making available to pharmacists and physicians, medicinal preparations of the highest degree of accuracy.

In the early 70's, pharmaceutical progress meant the discovery of new vegetable drugs. Energetic—and extensive—explorations gave to the medical profession such valuable and widely used drugs as Cascara and Coca. Then, in 1879, came one of Parke-Davis's greatest contributions to pharmacy and medicine—the introduction of the first chemically standardized extract known to pharmacy. Desiccated Thyroid Gland, the first endocrine product supplied by the company, was introduced in 1893. One year later, Parke-Davis established the first commercial biological laboratory in the United States. In 1897 came the introduction of the first physiologically assayed and standardized extracts. And throughout these early years, the fundamental Parke-Davis policy—precision in pharmaceutical manufacture—was crystallizing.

Since the turn of the century, progress of the company has continued apace. Diversified research activities cover the major phases of medical treatment—including the endocrine, biological, vitamin, and chemotherapeutic—and new discoveries are carefully evaluated through the company's extensive facilities for clinical investigation.

The company's home offices and research and manufacturing laboratories in Detroit occupy six city blocks on the Detroit Riverfront, adjacent to the Detroit-Walker-ville ferry, which connects the city of Detroit with the Province of Ontario, Canada.

Through the use of full pages in leading national magazines Parke, Davis & Company are carrying on an advertising program that has attracted wide attention. As might be expected, their advertising is unique, ethical, distinctive. They make no direct attempt to sell their products to the public by means of this publicity. In a sincere effort to render a valuable service to the medical profession, they are running a striking series of messages based on the "See Your Doctor" theme, and physicians throughout the country are constantly experiencing evidences of the results of this broad educational program.

RANDOM THOUGHTS OF THE SECRETARY

January 27th. Sitting in a public hearing to consider the wishes of the dear public in Arkansas, yet strangely packed in favor of making entrance into Arkansas easier for spine manipulators.

January 28th. For a bountiful dinner at Clyde McNeils, which makes our dietary efforts completely out of date, we are privileged to do honor to W. J. Curry, ninety years young today. Hale and hearty, enjoying life, worry and care pushed aside, what happiness must be his tonight as he reflects over 63 years of service to humanity in north Arkansas! His anecdotes bring mirth to all of us to a late hour, when Everett Moulton cruises southward with us as a quiet, contemplative passenger.

January 31st. For the second day we travel to Mena to keep a court appointment; the prosecuting attorney attaching, in our opinion, extreme importance to the fact that we considered the deceased's cervical vertebra fractured.

February 4th. This day treating the wife of a colleague who seems little assured that the X-ray will not hurt.

February 6th. Returning from Russellville today, the youngster insists on stopping at the Green Cottage where he makes away with two hamburgers. If we boost this place much more, it will make Duncan Hones' Adventures on Good Eating.

February 12th. By this time surely the medical profession of Arkansas realizes that there is value in organization, particularly if that organization be aggressive, united and earnestly seeking to uphold the ideals of a noble calling.

February 20th. The faithful gather with Johnson County at Clarksville for the annual good-time, mentioning only in the passing, those shielded personages—Fay Jones, Goldstein, Hoyt Allen, Carruthers, Paul Mahoney—who wired regrets that the bad roads kept them away. W. J. Hunt came right through Little Rock from Warren and the good dean, Cromer, managed to plow through the snow drifts to make it. At that it was a banquet for the hardier ones. Tommy Douglass, finally reacting to constant association with Earle Hunt, told a story which suggests even more from him next time and Krock gave a nautical twist (being one of the staff of that disbanded naval unit at Little Rock) to his definition of dancing. Jim Broach, Camden's contribution to high-class entertainment, pleased all with his impersonations and with "Empty Saddles." For those who failed to call and claim their steaks, Johnson County promises to be a good sport and will invite them again; but we who were there have something in the way of fun and fellowship that can never be yours.

February 23rd. Feeling the urge to "go somewhere," having been a fireside companion for the past six weeks (ask the wife!) the family sets forth for Tulsa with no excuse other than the ride and an opportunity to let the youngster take to the ice with his skates, used but once last winter. The weather closes in on us at Muskogee but we continue remembering that all of the hardy ones who attended the Johnson County banquet would have done the same thing (or sent regrets). Ice skating is found to be a popular sport in Tulsa this afternoon and the youngster keeps at it until closing time, insisting on return engagement. To The Louisianne (plagiarizing the name only) where we do have good gulf trout and thence homeward in even worse weather but everyone happy and glad of the trip.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

On January 22nd the Spring Board Meeting of the Auxiliary to Arkansas Medical Society was called to order by the President, Mrs. Alfred Hathcock, at 9:45 a. m. at the Frederica Hotel in Little Rock. There were thirty-two members present. Minutes of the Fall Board Meeting were read and approved. Report on changing of the yearbooks given by Mrs. Alfred Hathcock. Motion by Mrs. B. A. Rhinehart that the printing of the yearbooks be left to discretion of the President, seconded by Mrs. Curtis Jones. Motion passed.

The Council of Arkansas Medical Society agreed to the placing of stars beside the names of Doctors whose wives are Auxiliary members. They did not vote to help with the raising of the Ilse F. Oates Student Loan Fund. Secretary instructed to write a note of sympathy to Mrs. P. H. Phillips, Ashdown, on the loss of her husband. Also a note to Mrs. C. E. Kitchens, DeQueen, who has been very ill.

Report of nominating committee read by Mrs. C. E. Oates. Program Chairman for Convention appointed by President: Mrs. L. F. Barrier, Mrs. T. Duel Brown, Mrs. Ralph Cross, and Mrs. J. B. Crawford.

By motion the Library Fund was continued for another year. Mrs. Oates appointed to get President's pin. By motion all reports were accepted. Mrs. Thompson of Hot Springs announced the election of Mrs. Turner Wooten to first Vice-President of Southern. Mrs. W. R. Brooksher, Jr., made Council Woman to Southern. No further business, the meeting adjourned for luncheon.

Dr. Preston Hunt, president of the Texas State Medical Association, was guest speaker at the meeting of the Bowie and Miller Medical Auxiliary, Friday afternoon, at the home of Mrs. Roy F. Baskett, on Hickory Street, and gave an interesting talk on "How the Auxiliary Serves the Medical Association," listing the various ways in which wives can be of distinct help to the medical profession.

Beautiful flowers in shades of blue and yellow were used in profusion about the house. Mrs. Joe Tyson conducted a brief business session after which guests were invited to the dining room. Mrs. William Hibbitts presided at the table and poured tea. Adding effectiveness to the table appointments were blue bubble bowls, filled with large yellow pansies. Co-hostesses with Mrs. Baskett were: Mrs. Decker Smith, Mrs. B. C. Middleton and Mrs. H. E. Longino.

Dr. and Mrs. H. S. Watson of Earle, Arkansas, are the parents of a fine boy, Herbert Shirley Watson, Junior, who arrived Friday, January 17th.

ATTENTION AUXILIARY MEMBERS!

Have you subscribed to the "Bulletin"? If not, please send in your subscriptions now to Mrs. J. Murry Smith, Smackover. Price \$1.00. In this Bulletin, you are informed of all the latest news of our Auxiliary work.

Mrs. Alfred Hathcock of Fayetteville, state president of the Auxiliary of the Arkansas Medical Society, paid her first official visit to the Auxiliary of the Sebastian County Medical Society, Monday, when she and Mrs. Fount Richardson, secretary of the State Auxiliary, also of Fayetteville, were guests of honor at a luncheon and meeting of the local organization.

Mrs. Hathcock was a speaker on the program, her theme, "Service to Humanity."

Mrs. I. Fulton Jones, vice-president of the Auxiliary, presided at the meeting in the absence of the president, Mrs. M. E. Foster. Hostesses were Mrs. W. R. Brooksher and Mrs. D. W. Goldstein. In addition to the guests of honor, guests were Mrs. C. H. Finney, Mrs. B. B. Bruce, Alma, and Mrs. G. G. Woods, Huntington.

Members present were: Mrs. I. Fulton Jones, Mrs. W. F. Adams, Mrs. S. P. Stubbs, Mrs. A. A. Blair, Mrs. Charles T. Chamberlain, Mrs. Walter Eberle, Mrs. E. E. Scott, Mrs. Everett Moulton, Mrs. J. L. Kelleam, Mrs. J. S. Southard, Mrs. Carl L. Wilson, Mrs. S. J. Wolfermann, Mrs. W. F. Rose, and the hostesses.

DOCTOR'S DAY OBSERVANCE

March is the month the Auxiliary to the Arkansas Medical Society will observe Doctor's Day.

The Medical Auxiliary of Georgia was the first to observe Doctor's Day. Those women felt that, while most people are informed about histories of kings, inventors and discoverers, very few of struggles and sacrifices of the members of the Medical profession; so in 1934 the Woman's Auxiliary of the Medical Association of Georgia passed a resolution to designate one day every year as Doctor's Day. The idea aroused interest throughout the South, and all the Southern States have since adopted the custom. For a number of years several counties over our state have observed Doctor's Day, but only last year at the Spring Board meeting, under the leadership of Mrs. C. E. Kitchens, state President, a resolution was passed to observe Doctor's Day each year, March was the month voted on.

Let me urge each county auxiliary to begin now making plans and some time during March honor our physicians in some way.

Many physicians lead lives of usefulness in the communities in which they live, practicing their profession conscientiously, loved by all they served. They find time amid pressing cares of practice to consider the broader problems of medicine, of disease prevention, of health education and of the professional and social status of the medical profession. A few physicians not only do this in the communities in which they live, but they carry their work into broader, wider fields in the state and nation.

Let's not forget to honor these men, to express our appreciation, respect and love for the members of the medical profession.

MRS. H. T. SMITH,
Chairman, Doctor's Day Committee.

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

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Dr. Thomas P. Foltz was program speaker at a luncheon and business meeting of the Auxiliary of the Sebastian County Medical Society February 10th at which time the president, Mrs. M. E. Foster, presided.

Dr. Foltz outlined plans for a negro hospital, and explained ways in which the auxiliary may assist the Medical Society by co-operating in furnishing the hospital.

Mrs. Foster and Mrs. D. W. Goldstein have received nine renewals of Hygeia subscriptions since the January meeting. Mrs. Foster's report showed. Mrs. S. J. Wolfermann, Arkansas commander of the Women's Field Army of the American Society for the Control of Cancer, and Mrs. W. R. Brooksher, Jr., state deputy commander, discussed plans for a state-wide campaign to be staged the first week in April.

Mrs. Fred Krock, Arkansas vice-commander in charge of the tenth district, outlined plans for the city drive. She is chairman of the Auxiliary's public relations committee, which sponsored the annual public relations program for the senior high school Parent-Teacher association Monday afternoon at which the Auxiliary presented Dr. Foltz as the speaker on "Socialized Medicine."

Hostesses for the luncheon were Mrs. A. A. Blai and Mrs. E. C. Moulton. Mrs. Ralph Crigler was added to the Auxiliary's personnel. Mrs. Roy E. Shirmer was a guest of the Auxiliary. Other guests were: Mrs. M. E. Foster, Mrs. W. R. Brooksher, Jr., Mrs. J. S. Southard, Mrs. Charles T. Chamberlain, Mrs. S. P. Stubbs, Mrs. E. E. Scott, Mrs. S. J. Wolfermann, Mrs. Walter Eberle, Mrs. I. F. Jones, Mrs. T. P. Foltz, and Mrs. W. F. Rose.

MRS. W. F. ROSE,

Publicity Chairman of the Auxiliary of
the Sebastian County Medical Society.

The Auxiliary to the Jefferson County Medical Society entertained last night at a buffet dinner honoring two state officers of the Auxiliary, Mrs. Alfred Hathcock, the president and Mrs. Fount Richardson, secretary, both of Fayetteville.

The Auxiliary entertained in the home of Mrs. John Walker. The lace-covered dining room table, from which the dinner was served, was centered with an arrangement of token roses, acacia, and cornflowers and burning bush were used. Later in the evening Mrs. Hathcock made an informal talk on the work of the medical auxiliary in the state. This is the second visit made to the local auxiliary by Mrs. Hathcock and Mrs. Richardson.

Auxiliary members who were present for the evening included: Mrs. Walker, Mrs. Virgil Payne, Mrs. W. T. Lowe, Mrs. O. W. Clark, Mrs. Fred Hames, Mrs. Hunter Causey, Mrs. J. C. Beard, Mrs. J. S. Spillyards, Mrs. O. C. Hankinson, Mrs. Ross Maynard, Mrs. J. W. John and Mrs. J. S. Jenkins. Mrs. Hathcock and Mrs. Richardson left this morning for Fayetteville after being the guests of Mrs. Payne for the night.

The Woman's Auxiliary to the Pulaski County Medical Society met Wednesday at the home of Mrs. W. L. Sadler with 36 members and two new members present. The Nominating Committee included: Mrs. S. C. Fulmer, chairman, Mrs. J. B. Crawford, Mrs. B. A. Rhinehart, Mrs. D. M. Switzer, and Mrs. J. R. Runyan. The

double quartet from Philander Smith College gave a program of Negro spirituals. Announcement was made of a book review to be given in February at Parnell Hall under the sponsorship of the student loan fund with Mrs. Paul Fulmer, chairman.

WHAT EASTER MEANS TO 300,000 AMERICAN CHILDREN

To most of America's children, Easter means gayly colored eggs and the Easter rabbit. But to those children whose misfortune it is to be in some way crippled physically, Easter has come to have an additional significance.

It means a chance for the concrete services which will help them find a Better Life—happiness during childhood, success as they grow older.

Through the annual sale of Easter Seals to the American public, the necessary funds are obtained to help provide the services which the child who is crippled both deserves and needs to find this Better Life. The Easter Seal Sale held from March 21 to April 1 is sponsored by the National Society for Crippled Children and conducted simultaneously in thirty states throughout the country by affiliated state organizations working continuously to improve the welfare of America's estimated 300,000 crippled children.

In our own state, the Arkansas Society for Crippled Children with its local chairman in practically every county is the one state-wide citizen's organization working for all of Arkansas' crippled children, regardless of the nature of their handicap. The daily efforts of the Society are directed toward insuring the physical and educational opportunities the child needs to become a well-adjusted person, participating in the life of his community, economically independent and productive.

This is a comprehensive and realistic program. The Society's program is summed up in the phrase "To See Every Crippled Child THROUGH," and comprises, in brief, the following phases:

1. Discovery, enumeration and registration of every crippled child in the state.
2. Diagnosis of the ailment at clinics, and early hospital care and medical treatment to prevent permanent crippling conditions, or to make the child as physically normal as possible.
3. Development of educational facilities to insure every crippled child an education.
4. Securing vocational guidance and training in a suitable trade or profession.
5. Assistance in securing opportunities for self-supporting employment compatible with the person's mental and physical capacities either in regular industry, sheltered workshops, or in the home.
6. Prevention of the causes of crippling.
7. Fostering recreational facilities for both children and adults—camps, playgrounds, clubs, etc.
8. Cooperation with state and federal departments and other private agencies to secure a comprehensive, efficient program of service.
9. Enactment of legislation to further this program in the state.

The sale of Easter Seals offers an opportunity for all citizens of the state to share in this work and thereby help build these children into happy, useful men and women.



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BOOK REVIEWS

Manual of Clinical Chemistry. By Miriam Reiner, M. Sc., Assistant Chemist to the Mount Sinai Hospital, New York, New York. Pp. 296. 18 illustrations. Price \$3.00. New York: Interscience Publishers, Inc., 1941.

This is a pocket size volume comprising 296 pages. Quoting from the author; "This book started with a few directions for internes who were called upon to perform blood sugar, urea, carbon dioxide content as emergency procedures, usually in the middle of the night. The brief manner of presenting the methods was found convenient and time saving for the internes and the laboratory technicians; hence other determinations carried out in the laboratory were written in the same form."

Under each heading the latest reference is given for those who wish to look up the original literature. Next is given a brief explanation of the reaction, list of reagents with percentage strengths, followed by the technic of the test. This is very concise and to the point and one does not have to read through many paragraphs to obtain the procedure. It is a valuable pocket size book that should be in the hands of anyone doing clinical laboratory work.

The Doctor and the Difficult Child: By William Moodie, M. D., F. R. C. P., D. P. M., Medical Director, London Child Guidance Clinic and Training Centre. Pp. 214. Price \$1.50. New York: The Commonwealth Fund, 1940.

In this work the author is apparently trying to express the opinions of parents of two types: those who underestimate and those who exaggerate symptoms and conditions. It seems to the reviewer that the older child,

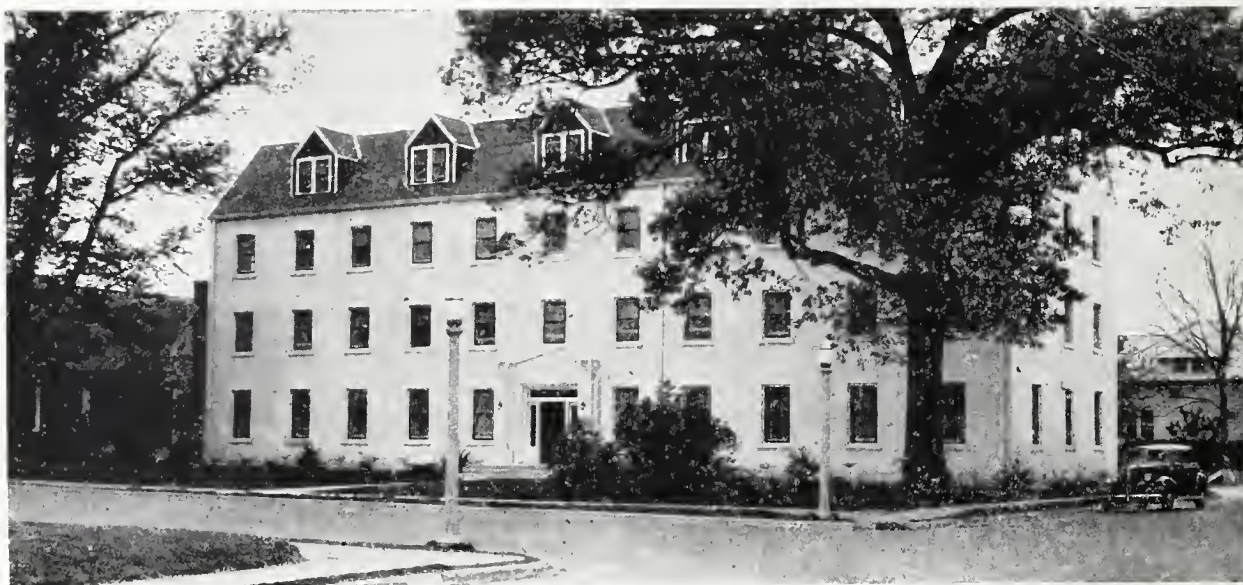
especially, has a viewpoint of his own. The book is not of particular value to the general medical man.

PHYSICIANS WANTED FOR CCC DUTY

Physicians are needed for the medical service of the Civilian Conservation Corps. The initial salary is \$3,200 per annum. No quarters for families are provided, and the physicians are required to pay for their food at camps. Temporary quarters for physicians are provided at the camps for a nominal fee. Physicians selected for this service are required to pay their own travel expenses to the headquarters of the district in which they are to be employed, where they are put on temporary duty for instructional purposes before being sent to camps. Travel expenses incurred in the transfer of physicians from the district headquarters to camps or in transfer from one camp to another are paid by the Government.

The principal duties at camps consist of the medical care of the enrollees and the practice of preventive medicine. To be eligible for this service, the physician must be a citizen of the United States, a graduate of an accredited medical school authorized to confer the degree of doctor of medicine, licensed to practice medicine, and physically able to perform the duties involved. Physicians sixty years of age or over will not be employed.

All physicians interested in this type of service are requested to submit their applications to the Office of the Surgeon, Headquarters Seventh Corps Area, Federal Building, Omaha, Nebraska, giving date on which available and preference of assignment in the following states: Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Missouri, Kansas, and Arkansas.



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No. 11

THE ADVANTAGES OF SERUM AND PLASMA TRANSFUSIONS OVER OTHER INTRAVENOUS MEDICAMENTS *

JOHN H. CONNELL, M. D., Pathologist, Huey P. Long Hospital
Pineville, Louisiana**

The venous channels have been the chosen route for the introduction of certain medicaments for many years. The earliest attempts at intravenous therapy date centuries back, but only recently has this type of therapy become prevalent. It is especially efficacious in those conditions wherein the extra-cellular fluid content of the body has become altered by some pathological process. Extra-cellular fluid primarily is represented by the blood plasma, plus the interstitial fluids of the body, this representing twenty per cent of the entire body weight. This fluid constitutes the immediate environment of the organism and the degree of normalcy of the individual is proportionate to the normalcy of this medium. The extra-cellular fluid sustains two important services, the conveyance of nutrition and waste materials and the regulation of the physico-chemical conditions within the organism, such as temperature and hydrogen ion concentration.

To supplant deficiencies of the elements that are necessary for electrolytic balance, such as sodium, chloride, bicarbonate, calcium, phosphorous, etc., has been the apparent objective for which therapeutic attempts have been aimed. The administration of solutions containing sodium chloride will oftentimes correct a disturbance of the electrolyte pattern in alkalosis and in moderate acidosis. Sodium bicarbonate or sodium lactate can be given to advantage in cases of severe acidosis. A more balanced salt solution alleviates the condition of severe dehydration, as renal function becomes defective and intravenous glucose is efficacious in supplying energy when other more normal routes are unavailable.

There are, however, various conditions in which supplementary additions to the blood stream fail to return extra-cellular fluid to normal. The intricacies of the vascular tree and osmotic phenomena are ill understood. It is common clinical experience in treating certain conditions that large amounts of the usual fluid agents can be administered without correcting the underlying defect. Severe burns, and in the condition clinically known as shock, due either to trauma or hemorrhage, there is little success in regaining or maintaining normal vascular conditions. It is in these conditions where whole blood transfusions have been used with considerable success. There are, however, definite imperfections and shortcomings in the use of this agent; time and useless bulk are factors frequently leading to adverse results.

It is surprising then, that it has taken so many years for physicians to realize and to use to advantage that portion of whole blood which is the beneficial agent. The introduction of human blood, serum or plasma seems the most natural thing as it contains all the virtues and none of the vices of other intravenous fluid medicaments. Within this are found all the attributes that are present in a normal environment, including a protein fluid which is not permeable to the capillary walls and one that will remain in the circulation.

The experimental use of blood serum in combating experimental pathologic conditions has recently been done by Mahoney (1) who produced traumatic shock in dogs and noted the advantages of plasma over other intravenous agents. Bond and Wright (2) after extensive animal experimentation concluded that serum is alone capable of raising and maintaining blood

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pressure for any length of time. More recently, Levinson (3) employing dogs, found it effective in combating shock secondary to severe hemorrhage. Working on human subjects many favorable reports have recently appeared in the literature. The latest; Strumia (4) reports a large series of successful administration of blood plasma in the treatment of various types of secondary shock; McClure (8) has successfully treated severe burns with blood sera.

The establishment and maintenance of a serum or plasma bank is not attended with great difficulty or cost. The technique (5-6) is relatively simple and the material once obtained remains chemically stable. Kept at ice box temperature plasma or serum retains its anti-shock properties for months. For immunological and pro-thrombin activity its use is limited in that these attributes tend to decline after a few weeks. Transportation is no problem, because, unlike whole blood, agitation does no harm. For times of disaster and war, this would be invaluable and just this past month volunteers in England have been asked to donate blood for this purpose.

A limited working experience reveals at once the almost miraculous therapeutic effects of this agent in the treatment of secondary shock. Shock has been adequately described (7) as the "clinical condition characterized by progressive loss of circulating blood volume brought about by the tissue anoxia which results from inadequate circulation." It is encountered with or without external bleeding and is not due to lack of red blood cells, but due to an inadequate transport medium within the vessels. In that event the introduced medium that closest resembles the normal, the one which will be sustained in the vascular tree and enable the physician to increase rapidly and permanently the patient's blood volume should be used. Whole blood has been the answer; substitutes have notoriously been a failure. But, whole blood is not ideal for reasons already mentioned. The results obtained with serum and plasma are similar, but reactions are said to occur with sera and never with plasma and the latter is slightly easier to obtain and regulate.

Here, briefly, are representative encountered cases:

A colored male, aged 27, entered the hospital four hours following a traumatic amputation of a lower extremity above the knee. On entrance, the man was in profound shock, exhibiting all the clinical signs and having a systolic blood pressure of 40. Serum was at once administered at the rate of 10 to 15 cc. per minute.

Within 30 minutes, the blood pressure began to rise and after the administration of 900 cc. the blood pressure reached 140/80 and remained at this level. At this time he was considered a good surgical risk and disarticulation of the thigh was done. During the operation, 400 cc. more of serum was administered for prophylactic purposes. The immediate and late postoperative course was remarkably good.

A white female, aged 45, had a total hysterectomy performed with no apparent excessive hemorrhage, the operation lasting fifty minutes. At the end of the operation, circulatory collapse, apparently intervened and the patient went into shock, was pulseless, with a blood pressure reading too low to be determined. The immediate administration of serum was started and before thirty minutes had elapsed, the patient returned to an almost normal state.

A colored female, aged 32, entered the hospital with massive uterine hemorrhage associated with a placenta previa and subsequently went into shock. Accompanying the gynecological procedures, 700 cc. intravenous human serum was administered and recovery from shock was complete. The patient made a normal postpartal recovery. Hemoglobin values were rapidly recompensed naturally, and within ten days these values approached normal.

These three cases illustrate the three varieties of shock: trauma, vasomotor and hemorrhage and the prompt response to intravenous human sera. Many individuals have succumbed while the laboratory man is attempting to obtain suitable blood for transfusion and others from adverse reactions. In pooled human sera, typing and matching is unnecessary and the immediate use while still cold has never given adverse reactions.

Serum and more especially plasma appears to be the ideal medium for the permanent establishment of proper circulation in secondary shock. Its protein content and osmotic quality as a crystalloid solution, re-establishes normal conditions within the extra-cellular fluid which is so necessary for the environment of the organism. Further, it is easily obtainable, can be kept for long periods, is always ready for immediate use, is free of untoward reactions and can be readily transported. With the use of serum it is possible to avoid the emergency blood transfusion which is oftentimes too late. In severe trauma it can be used prophylactically to prevent the occurrence of shock. It appears, and has been reported, to be lifesaving in severe burns that exhibit such high degree of blood concentration. The lyophilic drying process of the serum in the future, will very probably be a potent medical instrument in times of disaster and war.

Conclusion

The intravenous administration of blood serum and plasma has proved to be extremely effica-

cious in the treatment of various forms of shock and is an indispensable therapeutic agent.

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SPEAKER'S MATERIAL

The Bureau of Health Education of the American Medical Association offers to local physicians the loan of prepared material for speakers addressing lay audiences. Even though a physician may be an able speaker, he frequently hesitates to accept invitations to speak before lay audiences because time is required to prepare material in suitable language for such audiences.

It is here that the HYGEIA Clipping Collection loan service is of value. These collections consist of HYGEIA material. They are patterned after the American Medical Association's Package Library. The advantage of this material is that it is written in non-technical language that the layman can understand. Thus, the physician is saved the effort of translating technical material into language easily understood by non-medical groups.

There are collections available on 82 topics; accompanying most collections is a speaker's outline. This outline is not intended as a fixed pattern which the speaker must follow but is merely offered as one way in which the material may be presented. As the physician reads the clippings, he may make his own notes on the outline and use only that portion of the material appropriate to his community.

The collections may be borrowed for a 10-day period and the only charge to the physician is the return postage for the bound material. Collections should be ordered at least two weeks in advance, and first, second, and third choice should be indicated since collections are not always available.

The demand for this material has grown tremendously the past several years. Several state medical societies, as well as a few county medical societies have found it to their advantage to develop speaker's bureau library services of their own. In spite of the great demand for this material and the amount of publicity it has received, there are still a number of physicians who are not acquainted with the material offered by the Bureau. The practicing physician is not always a polished platform orator and welcomes aid of this type.

APPENDICITIS

EDWARD M. MIERS, M. D.

Mena

There seems to be but a slight variation in the mortality of appendicitis taken over a period of the past fifteen years. With all types of cases and with all sorts of surgeons operating, it seems surprising that the danger marks which should make the careful surgeon delay operations are not kept clearly in mind.

The most serious of these symptoms is distension. Distension should be the danger signal—the "stop-look-and-listen sign" for every surgeon. No patient can recover after a surgical operation, or before one, for that matter, without a return of normal peristalsis. Let thoughtlessly, how dare we invade such a serious condition and add more trouble by injury to an already serious condition through handling of the gut, anesthesia, and the admission of air into the abdominal cavity, all of which increase distension by preventing the normal return of peristalsis. When you have an inflammatory plug at the terminal end of the ileum, holding peristalsis in abeyance, such as an acute appendix does, and if distension has already taken place to a considerable degree; give nature a few hours to allay the inflammation, and do not try to fool yourself into thinking you can do it by any kind of surgical interference. In case one sees a patient with the classical symptoms of appendicitis plus distension, this patient, by all means, should be placed upon an expectant treatment with plenty of morphine and water freely, except by mouth. Heat is a better treatment for appendicitis than ice, as ice masks the symptoms and one is at a loss sometimes to really know whether his patient is improving or that the ice cap has so thoroughly masked the symptoms that they are not clearly discernible.

When you take into consideration that anything can happen to an appendix within twenty-four hours, from the simple, acute inflammatory stage to gangrene and suppuration, and that various types of people react differently to pain and infection, therefore, one is not able to judge accurately the severity of the attack by the patient alone. Another factor that should be borne in mind constantly is that the patient is being confronted with the trying ordeal of an operation and he is making every effort at his disposal to minimize the severity of the attack and, thus, to try forestall the possibility of surgical intervention.

I note, with a great deal of pleasure and satisfaction, in a British Medical Journal, that they have been able in quite an accurate degree to determine the condition of the patient and his resistance to the attack of acute infections, and, in many instances, give a very accurate prognosis as to the outcome, and it is accomplished in this manner:

If the number of **new** leukocytes are ten to twenty to the field, the patient can be operated with almost a sure recovery. If the number of new leukocytes are from twenty to thirty the condition is considered serious, and if the number of new leukocytes are between thirty and forty, ninety per cent of the patients will die. When the new leukocytes are more than fifty all the patients will die, if operated. This is a direct index as to the virulency of the infection.

It is certainly gratifying to have such a valuable adjunct to help one arrive at a definite conclusion as to the severity of the patient's condition and it also affords one a great deal of satisfaction to make a prognosis that is so satisfactory, thus putting surgery on a plane where it rightly belongs. I am quite sure that in many operations performed on serious cases, the surgeon's opinion as to the ultimate result or recovery is predicated upon fear or anxiety to operate, more than conviction. It would seem that in this age of better surgeons, better surgical technique, better operating facilities, better anesthetics, a better knowledge of the pathology of appendicitis, together with better pre-operative and post-operative care the mortality of appendicitis should decline in ratio to the advancement of surgical and pathological knowledge gained. This, however, is not true, and a very surprising condition exists in a large city in a neighboring state which stands second to the highest in mortality rate in the U. S. in appendicitis for 1932. This is not due, I am sure, to the fact that the surgeons are not anxious and willing to operate, but I am quite sure that it is due to an over-zealous desire on the part of most surgeons to operate as soon as they see the patient, regardless of conditions. The actual operation, if one will get this clearly in mind, requires far less skill than the real diagnosis, preparations, and dealing with the pathological condition, when to operate, etc., than does the actual opening, removal of the appendix and closure. If you will consider distension carefully, the degree of distension, the generalness with which it occurs in the abdomen, when examining a patient for appendicitis, many

of the sequelae following ill-advised surgery can be avoided. On the other hand, it is perfectly obvious that a surgeon who will stand by neglectfully and allow a simple case of appendicitis to rupture and form an abscess before operating is equally as guilty as the surgeon who operates when there is no possible chance of saving the patient's life. Distension is the first indication of secession of peristalsis, followed by ballooning of the intestines with a transmigration of the bacterial flora of the gut directly through its wall, thus producing a fatal peritonitis. Heat, fluids, normal salt solution, colon tube, nothing by mouth, all favor a return of peristalsis, while operation only insults an already distended, inflamed gut and further produces trauma, still further prevents a return of peristalsis, thus producing more distension, and thus, inviting a fatal termination. As soon as peristalsis returns and gas is expelled then surgical intervention is invited. Never operate when a patient is going into a distension cycle—but—when he is coming out of it.

Arneth first elaborated a method of differential counting, in which he divided the leukocytes into certain forms such as "stabs" and "juveniles." He had five divisions and he placed the "stabs" and "juveniles" on the left of a midline and the older forms on the right, consequently, his counts showed "shifts to the left or the right," as the case might have been.

Schilling of Vienna then modified the German count so as to simplify it, but it remained for Watson to make the thing very simple. Watson points out that the forerunner of all the neutrophils, eosinophils, and basophils is the myeloblastic cell. Now since, in leukemias the excessive production of white cells results in large myeloblasts being poured out into the blood stream, it is deduced that the larger the cell and the nearer the nucleus is to being round, as in the myeloblast, the younger is the cell. The older the leukocytes and the more it has been threshed around in the blood stream, the more nuclei it has. Watson thinks that the more the bone marrow is stimulated to produce the granular leukocytes, the more immature forms it will turn out in its haste.

It is all perfectly logical. A white blood count of the polymorphonuclear cells shows two things, viz:

- (1) The total white blood count indicates the resisting powers of the patient.
- (2) The percentage of polymorphonuclear cells indicates the severity of the infection.

(3) The percentage of young forms of polymorphonuclear cells indicates again the severity of infection, because it shows the marrow is drained of its reserve of older forms and in its haste to stem the infectious tide it is pouring out cells to the battlefield which are not yet fully trained. Normally, in the blood stream, there are not more than 5% of the polymorphonuclear cells which are young forms.

From the white count, therefore, you can deduce from the above three postulates that:

(1) A high total count with low polymorphonuclear cells indicates a high resistance and low grade of severity of infection.

(2) A low total count with high percentage of polymorphonuclear cells indicates low resistance and high grade severity of infection.

(3) With a high total count and a high percentage of polymorphonuclear cells, that is, when both increase together, it indicates that there is a high degree of severe infection and as long as the count stays like that the prognosis is good.

With 80% polymorphonuclear cells the total count should be 15 to 20,000. With 90% polymorphonuclear cells the total count should be from 20 to 30,000. Over 80% polymorphonuclear cells points to pus, and a count of over 80% points to an extremely virulent infection.

Total count	30,000
Polymorphonuclear	88%
Polymorphonuclear young	20%
Polymorphonuclear old	80%
Lymphocytes	12%

A count like the above indicates that the patient has a high resisting power (total 30,000) to a moderately severe infection (young forms 20%). If nothing happens to him he should get well even though he is pretty sick at the time this count is made. In other words, he has the stuff to fight with provided no one robs him of it by some complication.

It is important that your laboratory technician know what he or she is doing in making the old and the young count or you will be misled. That is the reason I am specifically pointing out to you just what to look for in making your leukocyte count and grouping as to old and young.

Summary

Pay particular attention to distension in every and all cases of abdominal conditions, whether acute or chronic, the degree of distension and the generalness with which it is present, the facial expression of the patient, the pulse, temperature, and the number of new leukocytes per field and their ratio to the total number of leukocytes present, and you can, to a very good degree, determine the virulency of the infection plus the ability of your patient to withstand surgical intervention.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhaler, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith, and A. S. Buchanan.

The Arkansas Medical Society was called to order at eleven o'clock at the Miller County Court House on May 3, 1904, by President Leonidas Kirby, of Harrison. The address of welcome was delivered by Dr. J. R. Dale, of Texarkana, and the response was given by Dr. L. P. Gibson, of Little Rock.

Considerable discussion was indulged in by the House of Delegates as to the re-establishment of a State Journal of the Arkansas Medical Society. No action, however, was taken on the matter. A resolution was introduced that no physician should be elected President of the Arkansas Medical Society who was a resident of the town in which the association held its meeting. This resolution was held for lay-over, with the recommendation for adoption, but to lay-over for final vote for one year.

The officers elected for the ensuing year were Dr. J. P. Runyan, President; and Dr. C. C. Stephenson, Secretary, of Little Rock. Dr. Stephenson proved to be a most acceptable and efficient secretary.

During the next two years the membership of the Arkansas Medical Society more than doubled.

The society adjourned to meet in Little Rock.

On May 15, 1905, in the Senate Chamber of the Arkansas State House, in Little Rock, the Arkansas Medical Society was called to order at 3 o'clock p. m. for a meeting of the House of Delegates by the President, Dr. J. P. Runyan. It was during this meeting, by resolution of the House of Delegates, that the Arkansas State Journal was again established under the man-

EDITORIAL NOTE: This is the fourth installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

agement of the Council. The editor selected was Dr. C. C. Stephenson, the secretary of the association.

General session met at 11:25 a. m. in the Senate Chamber on May 16th, Dr. J. P. Runyan in the chair. Dr. Runyan announced that General Haynes of Little Rock was present, and, upon being introduced, General Haynes extended to the members of the Society an invitation to attend the funeral of General T. J. Churchill, distinguished General of the Confederacy and ex-Governor of Arkansas.

Dr. Runyan, in his annual address, advanced for consideration what he denominated the "broad guage" system of consultation with members of all schools of medicine. The matter was discussed at length but no action was taken. He also recommended a state bacteriologic and pathologic laboratory, something that was afterwards established.

The society elected for the ensuing year Dr. Samuel M. Carrigan, of Hope, Arkansas, President, and adjourned to meet in Hot Springs.

In Hot Springs, May 7, 1906, in the City Council Chamber, the House of Delegates of the Arkansas Medical Society was called to order at 8 a. m. by President Carrigan. Then followed a very complete and elaborate report of the secretary on the activities of last year. Recommendations for the establishment of a journal were completed, and from this time on the proceedings of the society appear in journal form.

Consideration was given to the question of a minimum fee for life insurance examinations.

General session of the Arkansas Medical Society was called to order at 11 a. m. on Tuesday, May 8, 1906, by Dr. Carrigan. The welcome address was made by Dr. C. T. Drennen, of Hot Springs, and for the Hot Springs and Garland County Medical Society, the welcome address was made by Dr. G. A. Hebert, president. The response was by Dr. J. W. Scales, of Pine Bluff.

Dr. Carrigan, in his annual address, recommended that a law, both state and national, be passed, compelling the formula for patent medicines to be published on the package.

Announcement was made in the Journal of the Arkansas Medical Society of the establishment of a new medical college, known as the College of Physicians and Surgeons, a college to be located on Lincoln Avenue in the place formerly occupied by the Maddox Seminary;

the dean of the new institution, Dr. J. P. Runyan, and its faculty personnel made up of physicians in Little Rock.

The thirty-first annual session of the Arkansas Medical Society was held in Little Rock on May 14, 15, and 16, 1907. Dr. C. T. Drennen, of Hot Springs, called the society to order and delivered an address on medical legislation, state board of examiners, and the doctor's life. Dr. Drennen, having been very active in correcting the drumming nuisance in Hot Springs, was certainly qualified to speak with authority. This session of the Arkansas Medical Society was rendered much more interesting by the presence of Dr. John A. Wyeth, of New York City, President of the New York Polyclinic and Post Graduate School. Dr. Wyeth read a most interesting article on the "Value of Organization in Medicine" and was given the place of honor at a banquet and reception at the Marion Hotel, where he met many former friends and acquaintances. Dr. Wyeth, shortly after the War Between the States, was a resident of Arkansas and built the court house at Augusta, Woodruff county, after which he went to New York, graduated in medicine, and became one of the pioneers in post graduate teaching.

Another distinguished visitor was Dr. C. S. N. Hallberg, a member of the Council on Pharmacology of the American Medical Association. Dr. Hallberg took part in the discussions, especially those involving the subject of pharmacology. His address on that subject and the activities of the Council of the American Medical Association on that question remains an outstanding article in our society transactions. This meeting of the Arkansas Medical Society was the most generally attended of any in its history.

Dr. C. C. Stephenson resigned as secretary and was elected President of the society. Dr. Morgan Smith was elected secretary and editor of the Journal.

Another visitor at the Little Rock meeting was Dr. Fenton B. Turck, of Chicago, who delivered an address upon "Nutrition of Gastric Atony."

In the Journal of the date of September 15, 1907, appeared an article by Dr. Henry Thibault, of Scott, announcing the discovery of a new local anesthetic; namely, the use of quinine and urea; in fact, all the soluble salts of quinine he described as being local anesthetics. The paper created something of a sensation and was generally discussed. Considerable doubt was

voiced by members as to the quinine being an anesthetic and it was thought that the injection of normal saline might produce the same results. This discovery of Dr. Thibault's brought him national recognition and the writer recalls that at a meeting of the State Society in El Dorado, the guest of honor, Dr. G. W. Crile, of Cleveland, Ohio, in delivering his address, asked if Dr. Henry Thibault was in the audience. Dr. Thibault arose and the two exchanged salutations.

At the meeting of the House of Delegates two amendments to Chapter 9, Section 5 of the By-Laws were recommended for consideration of the Society at its next meeting. Both advised admission of undergraduates to the State Medical Society.

The House of Delegates of the Arkansas Medical Society met May 12, 1908, at 9 a. m., Dr. C. C. Stephenson, of Little Rock, in the chair. Consideration of the two amendments to admit undergraduates to the Society came up and after a most elaborate discussion, participated in by nearly every member present, the effort to admit undergraduates was defeated. The general meeting of the Arkansas Medical Society was convened in the auditorium of the skating rink and was called to order by President Stephenson. The address of welcome for the Pulaski Medical Society was delivered by Dr. W. C. Dunaway, and the response was given by Dr. Sam E. Thompson, of El Dorado.

Dr. Stephenson, in his annual address, recommended the use of the old state house property for a state general charity hospital. This recommendation was never carried into effect, but later the property was utilized by Dr. Morgan Smith as dean, in fitting up the old state house and placing the first two years of the school of medicine in the old building.

Dr. Joseph T. Clegg, of Siloam Springs, was elected President for the ensuing year; Dr. Morgan Smith was re-elected secretary and editor of the Journal. The society adjourned to meet next in Pine Bluff.

During this session of the Arkansas Medical Society, Dr. Joseph Price, of Philadelphia, distinguished surgeon and gynecologist was the guest of the society and delivered a most interesting address. He was very hospitably received and was entertained by his numerous friends in Arkansas.

The thirty-third annual session of the Arkansas Medical Society met in Pine Bluff, Dr. J. T.

Clegg, of Siloam Springs, presiding. The meeting was called to order on May 18, 1909, at 10 a. m. by President Clegg in the YMCA auditorium. As usual the Bluff City entertained the society in its hospitable manner. A special tuberculosis meeting was held for the public in the First Methodist Church on the second evening of the meeting. On the last evening the members were the guests of the Jefferson County Medical Society at a banquet.

Dr. J. H. Lenow, of Little Rock, was elected President of the society. Dr. Henry Thibault called attention to the publishing of advertisements in the Arkansas State Journal of articles not proven, or at least not recognized by the Council on Pharmacy of the American Medical Association, and insisted that the Journal should be kept free of all such advertisements. Dr. Morgan Smith was again elected secretary and editor of the Journal.

In September, 1909, the Journal of the Arkansas Medical Society contains the name of Dr. C. P. Meriwether as editor of the Journal, a name that was to become beloved and efficient in the history of the Arkansas Medical Society. Dr. Smith continued as secretary of the society.

The thirty-fourth annual session of the Arkansas Medical Society was held in Little Rock, May 4, 5 and 6, 1910. The House of Delegates was called to order at 9 a. m. by the President, Dr. J. H. Lenow, of Little Rock. Dr. Lenow then read an article to the House, containing recommendations concerning the Medical Practice Act, Tuberculosis Sanatorium, and the Rockefeller donation of one million dollars for the purpose of eradication of hookworm in the South. A recent survey of the medical schools made by the Carnegie Foundation had resulted in radical change in medical education in the United States. Medical schools went out of existence in various cities and communities over the whole United States. The number was cut in half. Consolidations in places were effected between rival schools with the view of improving the type of service rendered by the institution. In Little Rock there were two medical colleges, the Medical Department of the University and the College of Physicians and Surgeons, an institution that had been in existence but a few years. Looking to the recommendations made by Dr. Flexner, of the Carnegie Foundation, that these two institutions should be consolidated and that certain improvements be made in physical equipment and teaching personnel, the follow-

ing resolution was introduced by Dr. Anderson Watkins, of Little Rock.

"Whereas, the medical department of the University of Arkansas has labored faithfully for thirty-one years to advance the cause of medicine and attain a proper standard without any financial assistance from the state; therefore, be it

"Resolved, that the medical department should be taken under the wing of the University of Arkansas by the following plan:

"The medical school should turn over to a properly appointed board of trustees of the University all its money, property and equipment. The board of trustees should govern the school as other departments of the University, including the faculty. The legislature of Arkansas should maintain the school by annual or biennial appropriations; and be it further

"Resolved, that the Committee on Public Policy and Medical Legislation is instructed by this House of Delegates to draft and advocate a suitable bill, to the effect of the above, in the next session of the Arkansas legislature."

In addition to the resolution of Dr. Watkins, Dr. F. E. Young, of Springdale, introduced a resolution to appoint a committee to consolidate the two medical schools. The following committee was appointed: Dr. Leonidas Kirby, of Harrison; Dr. J. G. Eberle, of Fort Smith; and Dr. Henry Thibault, of Scott. This committee reported and the President again appointed a committee to act permanently in the interest of consolidation. This committee was as follows: Dr. F. B. Young, Chairman; Dr. George S. Brown, Dr. J. C. Wallis, Dr. Leonidas Kirby, and Dr. C. S. Pettus. This committee acted until the medical schools were consolidated and the legislature of 1911, by an enabling act, took over the University of Arkansas Medical School and made it in fact, as well as in name, a part of the University. This act contained the following statement: "The State of Arkansas hereby pledges its faith and credit to forever maintain in Arkansas a first class medical school."

The legislature in 1909 had passed an act to create a tuberculosis sanatorium to be located at Booneville. This was accomplished chiefly by Dr. J. S. Shibley, of Paris, Arkansas, ex-President of the Arkansas Medical Society and a man devoted to medical progress. This beneficent work was the foundation of what is now an institution of which the State of Arkansas can be proud indeed. The building of the sanatorium was completed September 1st, and was formally opened by Governor Donaghey and other speakers.

There were two distinguished guests at this meeting, Dr. Jabez N. Jackson, of Kansas City, and Dr. H. N. Crossen, of St. Louis. In addition,

Dr. Charles Wardell Stiles, of Washington, delivered an illustrative lecture on hookworm disease. Dr. Stiles was the director of the Rockefeller bequest for the eradication of hookworm in the South.

Dr. Robert C. Dorr, of Batesville, was elected President and Fort Smith was decided upon as the next place of meeting.

The Journal of the Arkansas Medical Society of the date of May, 1911, contained the announcement of the appointment of Dr. H. H. Niehuss as associate editor of the Journal. Dr. Niehuss functioned in this capacity for part of a year.

Dr. R. C. Dorr, of Batesville, presided over the thirty-fifth annual session of the Arkansas Medical Society, held at Fort Smith, May 4, 5 and 6, 1911. The House of Delegates was called to order by President Dorr at 9 a. m. on May 2nd. The President's address to the House urged that telegrams be sent to Governor Donaghey and to the Senate in favor of Senate Bill 451, known as the Public Health Bill, which would come up for vote on that date, with a view of passing that bill in the interest of the medical society and the citizens of Arkansas. Dr. Dorr also recommended the establishment of an inebriate asylum.

The committee on consolidation of the medical schools reported that their duties were completed. Dr. Morgan Smith was elected President for the ensuing year and Dr. C. P. Meriwether was chosen secretary and editor of the Journal.

The next meeting of the Arkansas Medical Society was held in Hot Springs, May 13, 14, 15 and 16, 1912, at the Arlington Hotel. Dr. Morgan Smith presided. The House of Delegates was called to order at 2:30 p. m., May 13, 1912, by Dr. Smith. A report was made to the House on the consolidation of the medical colleges by a special committee of which Dr. L. P. Gibson, of Little Rock, was chairman. In the proceedings of the meeting of May, 1912, one finds the complete history of the consolidation of the medical schools and the efforts made to bring about that consolidation, all the difficulties, trials and tribulations of the committee in reconciling all the serious interference that wanted to prevent the consolidation. After all the efforts of the committee were completed and the consolidation effected, the committee reported that the work was done and that they were satisfied that the school, now the Medical Department of the University of Arkansas, in

fact, would go on making progress, advancing in every particular and becoming each year more worthy of the confidence and support of the medical profession in the State of Arkansas. They further stated that:

"We believe it is not only undesirable but impossible for the school to be continued without liberal appropriations from the State, and if for lack of such appropriations it should have to discontinue, we think this society should not only withhold its support from it, but denounce any effort to establish any other proprietary school in this state.

"Many of our state's undeserved criticisms we must endure; but we could and should prevent the odium of a second class medical college within our borders.

"In your consideration of this report we reverently commend for your meditation these words of St. Paul:

"Now I beseech you, brethren, mark them which cause divisions and offenses contrary to the doctrine which ye have learned; and avoid them.

"For they that are such, serve not the Lord Jesus Christ, but their own belly, and by good words and fair speeches deceive the hearts of the simple.

"For your obedience is come abroad unto all men. I am glad, therefore, on your behalf, but yet I would have you wise unto that which is good and simple concerning evil.

"And the God of peace shall bruise Satan under your feet shortly!"—Romans, xvi:17-20.

"L. P. Gibson, Chairman."

With this the history of the contentions concerning the taking over of the medical school by the State of Arkansas disappear from the history of medicine in the state.

On February 12, 1912, Dr. A. A. Hornor, of Helena, died. Dr. Hornor was one of the most colorful figures of the Arkansas Medical Society, an old bachelor, active in the practice of his profession, universally beloved, an ex-Confederate soldier, and always the ideal of the southern gentlemen. It would seem to the writer that such figures as Dr. Hornor have passed from the stage of medicine in Arkansas.

Dr. Edwin R. Dibrell, of Little Rock, was elected President and Little Rock was selected as the next meeting place of the Arkansas Medical Society. First Vice-President was Dr. G. A. Herbert, of Hot Springs. Dr. Dibrell did not live to fill the position as President of the Society at its next session in 1913 in Little Rock. Dr. Herbert presided over this meeting.

The writer pauses to pay a tribute of respect and affection to the memory of Dr. Edwin R. Dibrell. Dr. Dibrell headed the Department of Medicine in the School of Medicine of the University of Arkansas. He was universally regarded as a very high type of internist and was called very often into consultation by his

professional brethren. He was a graduate of the University of Pennsylvania and was a descendant of a line of physicians. Dr. Dibrell was of French extraction, Huguenot, and had in him many of the qualities of that wonderful people. He was in the very zenith of his professional excellence when he was taken by death.

During the meeting at which Dr. Dibrell was to have presided there were many expressions of grief and regret at his loss. Dr. Hebert presided over the meeting, called the House of Delegates in session at 9 o'clock a. m., Tuesday morning, May 20, 1913. It was during this meeting of the Society that a paper was read by Dr. C. H. Cargile concerning "Fee Splitting." Dr. Cargile called attention to the growing evil in this state and in other places, and urged that measures be taken to stop it. A report of the chairman of visitors stated that the old state house had been taken over by the School of Medicine and the first two years were to be given there; that many improvements had been made in teaching. The society adjourned, electing Dr. Frank B. Young, of Springdale, President, and Dr. C. P. Meriwether, Secretary.

Dr. William R. Bathurst was elected as editor of the Journal, the beginning of a career that was to mean much to organized medicine in Arkansas. Dr. Bathurst eventually became secretary and was invaluable in securing medical legislation in Arkansas.

The thirty-eighth annual session of the Arkansas Medical Society was held in El Dorado, May 19, 20, 21 and 22, 1914. The Union County Medical Society and the people of El Dorado did everything in their power to make every doctor feel at home. Dr. George W. Crile, of Cleveland, Ohio, was the guest of honor, and delivered a most interesting address on the subject of "Shock." Dr. Young, in his annual address, deplored the lack of funds for the State Board of Health. He referred to the article by Dr. Cargile on fee splitting and urged that measures be taken to eliminate that evil.

Dr. St. Cloud Cooper was elected President, and Little Rock selected as the next place of meeting.

The thirty-ninth annual session of the Arkansas Medical Society was held in the old First Presbyterian Church in Little Rock, on May 4, 5 and 6, 1915. The meeting was a most successful one. Dr. J. C. Wallis, of Arkadelphia, was elected President for the ensuing year. Dr. C. P. Meriwether and Dr. William R. Bathurst

were re-elected secretary and editor of the Journal. The Committee on Necrology reported the death of Dr. J. M. Keller, of Hot Springs, his death having occurred on May 27, 1914. Dr. Keller was at the head of the medical department of the Confederate army, trans-Mississippi division, during the War Between the States. He was a conspicuous figure in that great struggle. After the war, he practiced medicine in Louisville, Memphis, and finally in Hot Springs.

Texarkana was selected as the place for the next meeting.

The fortieth annual session of the Arkansas Medical Society met in Texarkana, May 2, 3 and 4, 1916. The House of Delegates was called to order by Dr. J. C. Wallis, President, at 9 o'clock on Tuesday, May 2nd.

The session adjourned, electing Dr. M. L. Norwood as President of the Arkansas Medical Society. Dr. Norwood had been very active in the passage of the medical law which now is on our statute books. He has been active ever since in securing valuable legislation for the profession in Arkansas and his election was a well-deserved honor.

The forty-first annual session of the Arkansas Medical Society was held in Little Rock, May 1, 2 and 3, 1917. Dr. M. L. Norwood, President, called the House of Delegates to order at 9:30 o'clock. The address of welcome was made by Dr. L. P. Gibson, of Little Rock. There is no record of a response. It is to be noted in the proceedings of the House of Delegates that Dr. L. P. Gibson was appointed to write a history of medicine in Arkansas. Dr. Gibson made his report to the House, "I have practically done nothing in the way of a history of the Arkansas Medical Society. I have the documents. I have gone through them, and I have located salient points in the history. I have practically done nothing in the way of writing it. In fact, I don't exactly feel that way now."

A memorial tablet was erected to Dr. John S. Shibley for the building of the Arkansas Tuberculosis Sanatorium. The memorial was unveiled on the 19th day of September, 1916, Dr. J. T. Clegg, of Siloam Springs, making the address of dedication.

The society found itself interested in the fact that this nation was at war. Charles Hillman Brough was Governor of Arkansas and was endeavoring to raise a quota of medical officers called for by the Surgeon General, 225 having been assigned to Arkansas. It is interesting to

note that Arkansas more than filled its quota. The profession responded admirably and a number of our physicians and surgeons went with the American Expeditionary Forces to France, serving as battalion surgeons, several being wounded in line of duty.

Dr. W. A. Snodgrass organized and commanded a unit, most of his personnel being made up in Little Rock. This unit performed services in England and as a mobile unit in France. It should be a matter of pride to the profession in Arkansas that her doctors responded so promptly to the call.

Dr. William R. Breathwit, of Pine Bluff, was elected President. There were resolutions of regret on the death of Dr. W. B. Welch, of Fayetteville. Dr. Welch was the first President of the Arkansas Medical Society. He had served as a distinguished surgeon in the War Between the States, and for almost half a century had left his imprint upon the history of medicine in Arkansas.

The forty-second annual session of the Arkansas Medical Society was held in Jonesboro, May 7, 8 and 9, 1918. The House of Delegates was called to order by Dr. Breathwit, President, at 10 o'clock a. m. The meeting at Jonesboro was interesting, but not large in point of attendance. Many of the members were away in the army in France and in posts scattered over the United States. Some members were there in uniform, having received permission to attend. The war, of course, was foremost in the minds of all present. Dr. Rupert Blue, Surgeon General of the United States Public Health Service, was the guest of honor and delivered an interesting address, as did also Major John D. McLean, Council of Defense, Washington, D. C.

Dr. Edward F. Ellis, of Fayetteville, was elected President. The writer pauses to speak in affectionate terms of the election of Dr. Ellis. He and the writer are the same age, born in the same state, and hold the same opinions on almost every subject. A well-deserved honor was paid to Dr. Ellis by the Arkansas Medical Society.

The forty-third annual session of the Arkansas Medical Society was held in Little Rock, May 20, 21 and 22, 1919. The House of Delegates was called to order by the President, Dr. E. F. Ellis, at 9:30 a. m. There were the usual reports of committees, one by Dr. Gibson who had been appointed to write a history of the Arkansas Medical Society. Dr. Gibson stated that he preferred the history should be written after his

death; that there were some things that he would be compelled to say that would be most uncomfortable.

There were two members who took an active part in the proceedings of this meeting who appeared for the last time: Dr. C. P. Meriwether, the secretary, and Dr. L. P. Gibson, who had been President, secretary and mentor of the Society for nearly fifty years. Dr. Meriwether died the following November and Dr. Gibson in the following December.

This was one of the few meetings of the Arkansas Medical Society of recent years that the writer was unable to attend, he being away with the army in France. There was the usual rejoicing over the return of the medical officers who had served during the World War. There were the usual number of excellent scientific papers on the program, among them one by Dr. Charles H. Cargile, of Bentonville, with the exhibition of the patient who was a lady from Dr. Cargile's home town and who had been under the doctor's observation for some years. On examination by members of the society it was found that she could, by effort, accelerate her own pulse from 82 beats per minute to 168 beats. She had been able to do this for a number of years. No explanation could be given as to the reasons for this peculiar condition.

Dr. George S. Brown, of Conway, was elected President and Dr. C. P. Meriwether, Secretary.

The forty-fourth annual session of the Arkansas Medical Society met in Eureka Springs, June 8, 9 and 10, 1920. The House of Delegates was called to order by Dr. George Brown, President, at 9:30 a. m., a quorum being present. Dr. W. R. Bathurst succeeded Dr. C. P. Meriwether as secretary. The Committee on Necrology held memorial services at 10 o'clock a. m. on Wednesday, June 9, at which time eulogies were pronounced over Dr. C. P. Meriwether, Dr. L. P. Gibson, Gaston A. Hebert, W. W. Hipolite, C. M. Lutterloh, Thomas M. Holland, and others. There was universal expression of sorrow over those who had passed away. Dr. G. A. Warren, of Black Rock, was elected President, and Hot Springs selected as the next place of meeting. Dr. William R. Bathurst was elected secretary and editor of the Journal.

The forty-fifth annual session of the Arkansas Medical Society met in Hot Springs, May 3, 4 and 5, 1921. The House of Delegates was called to order by Dr. Warren, President, at 9:45 o'clock a. m. Dr. Warren called attention to

several changes necessary in the Constitution and By-Laws. His presidential address was largely devoted to a history of the Arkansas Medical Society as he had known it for a number of years. He spoke about the meeting of the society in 1896 at Fort Smith. At that time the X-ray was just coming in and for the first time they saw the bones in the living bodies of their friends and themselves.

The society was honored by the presence of two fraternal delegates from sister states, Dr. T. S. Ragland, of Gilmer, Texas, as a fraternal delegate from Texas, and Dr. E. F. Bacon, of New Orleans, as a fraternal delegate from Louisiana.

The society elected Dr. Charles H. Cargile, of Bentonville, President, and Dr. William R. Bathurst, Secretary.

The usual number of scientific papers proved of more than ordinary interest. Perhaps the most conspicuous was that of Dr. Fred J. Taussig, of St. Louis, Missouri, the subject being "Recent Limitations in Operative Gynecology."

The forty-seventh annual meeting of the Arkansas Medical Society was held in Little Rock, May 17, 18 and 19, 1922. President C. H. Cargile, of Bentonville, called the House of Delegates to order at 9:30 a. m. The address of welcome was delivered by Governor T. C. McRae and Dr. Robert Caldwell, on the part of the profession. The response was by Dr. Henry Thibault of Scott.

The society elected as President for the ensuing year Dr. Robert Caldwell, of Little Rock, and as secretary and editor of the Journal, Dr. William R. Bathurst. Hot Springs was selected as the place of the next meeting.

The forty-eighth annual session of the Arkansas Medical Society was held in Hot Springs, May 2, 3 and 4, 1923. The House of Delegates was called to order by the President, Dr. Caldwell, at 10 o'clock a. m. Dr. Caldwell stressed the necessity for inviting some distinguished physician to be present at our annual meetings to conduct clinics and give clinical lectures.

The Committee on Necrology reported the deaths of members, among whom were Dr. A. C. Jordan and Dr. Zaphney Orto, of Pine Bluff. Dr. Henry Kirby died December 9, 1922.

The society elected as President for the ensuing year Dr. W. T. Wootton, of Hot Springs, and Dr. William R. Bathurst, of Little Rock, as Secretary. Fayetteville was selected as the next place of meeting.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

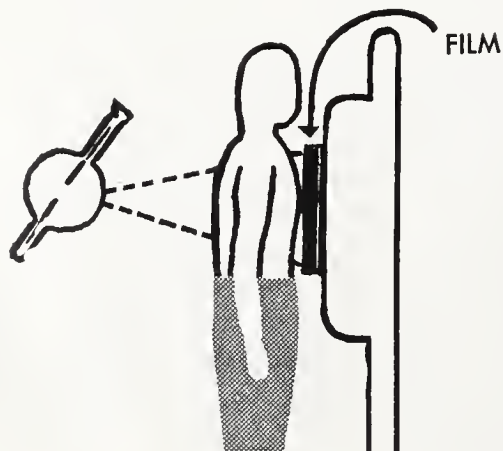
ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

CHEST X-RAY METHODS

EXPERIMENTERS have worked to devise a means of making chest X-rays of groups of people, economically and at a rapid rate. Last year approximately 490,000 students received special service which, in most cases, included an X-ray examination. Industrial groups are demanding a similar service. Mobilization for military training has further focused attention on mass methods of X-ray examination. S. Reid Warren, Jr., of the Moore School of X-ray Laboratory here presents brief comments of six methods now in use. Estimates of costs and weights are averages from which particular data may differ. The choice of methods depends, of course, on the particular task to be done.

Stereoscopic 14 by 17 inch Films

This is the best single method of chest X-ray examination. It requires expensive (\$4,000-\$5,000), bulky (1,000 pounds) equipment which must be permanently installed in conjunction with an adequate system to supply electric power to it (230 volts, 35-150 amperes alternating current). Exposure times from 1/30 second to 1/10 second are generally used. A specially equipped darkroom is required to process the films. Two films (unexposed film—\$1.50) are required for each examination. It is difficult to make exposures, process the films, and examine them fast enough to use this excellent method for mass surveys. The excellence of this method is the result of (1) high contrast within the diagnostic area of each roentgenogram, (2) small unsharpness or blurring of shadow borders, (3) convenient size for direct viewing, and (4) stereoscopic perception (Fig. 1).

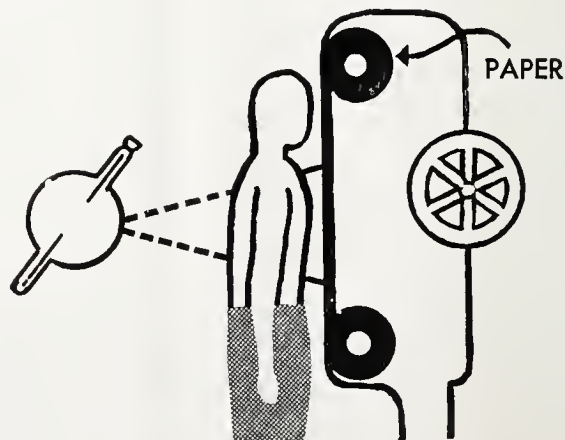


Single 14 by 17 inch Films

The same kind of X-ray generating apparatus is used for producing stereoscopic and single chest roentgenograms. The auxiliary equipment for making single films is less complicated and bulky. Apparatus has been constructed which can be carried in a truck and assembled to examine groups. One film (unexposed—0.75) is required for each examination. Advantages of this method are (1) high contrast; (2) small unsharpness of shadow borders, and (3) convenient size for viewing (Fig. 1).

Rolls of Paper 14 by 17 inch

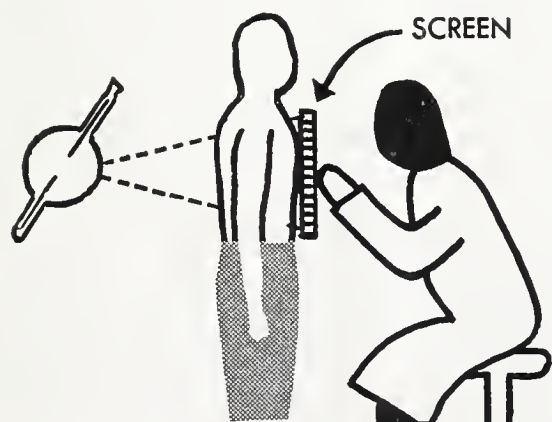
Rolls of paper 14 inches wide and about 150 feet long coated on one side with a photographic emulsion are used for this method which was devised specifically for surveys. A roll of paper is mounted within a light-tight mechanism which is arranged so that, after the first roentgenogram



is made near one end, the paper can be moved about 18 inches in preparation for the second exposure. After 100 exposures are made, the roll is removed and processed in special equipment. The roentgenograms are viewed by reflected light in a viewing device in which the roll of paper can be mounted. The X-ray apparatus and technic for paper are practically equivalent to those used for 14 by 17 inch film, though slightly more exposure is required for paper. The contrast in paper is less than in film although the diagnostic value appears not to be seriously compromised by this deficiency. Apparatus is transportable in a truck, rate of exposure is high (100 per hour), and examination of the roentgenogram is quick and convenient. The company which has developed this method supplies all apparatus, and delivers completed roentgenograms to the physicians for \$0.75 to \$1.00 per patient (Fig. 2).

Photofluorograms

In these methods, X-rays pass from the tube through the patient to a (14 by 17 inch) fluorescent screen which is thus caused to emit light. A photographic camera is focused upon the fluorescent screen in order to record the pattern of areas of varying brightness of light produced on the screen by X-rays. The screen, lens, and photographic film must be as fast as possible in order not to require excessive X-ray exposure. High-voltage generating equipment like that used for 14 by 17 inch film is required for photofluorography. Using screens and cameras now available, the unsharpness or blurring of shadow borders is greater in photofluorograms than in 14 by 17 inch roentgenograms.



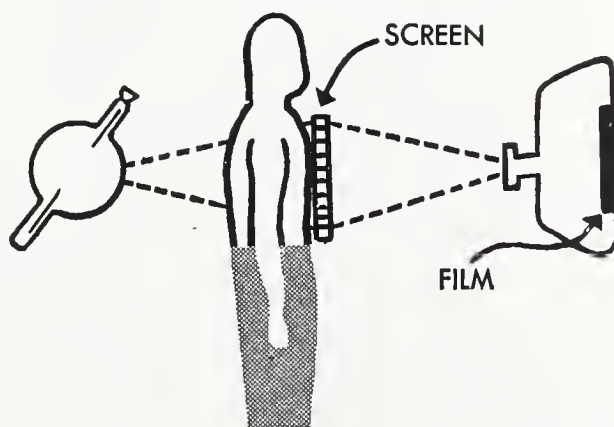
The lens used to make 4 by 5 inch photofluorograms is expensive (\$1,000). The 4 by 5 inch film is large enough to view without magnification. These films can be processed more conveniently than 14 by 17 inch film; the cost (one processed film, \$0.06) and filing space are far less for the smaller (4" x 5") film. Four inch film in rolls is not available.

The lens generally used to make 35 mm photofluorograms is an f:1.5 lens of the type used in miniature cameras. The 35 mm photofluorogram must be enlarged for clear viewing. Rolls of film can be exposed and processed by means of easily available photographic equipment; the cost (for each processed film, \$0.02) of film for each exposure is of course very small.

These methods are being studied in order to find means of overcoming the low contrast and gross unsharpness which are their chief disadvantages (Fig. 3).

Fluoroscopy

Apparatus for fluoroscopy is relatively inexpensive (\$800) and it requires a relatively low power input (10 volts, 10 amperes alternating current). The physician examines the fluorescent image of the chest in a darkened room and records his opinion. Thus there is no permanent record which can be re-examined by others. The contrast and sharpness of the fluoroscopic image are greatly inferior to those of a good 14 inch by 17 inch roentgenogram. The physician is subjected to scattered X-rays during the examination. This may be dangerous in a mass survey (Fig. 4).



No X-Ray survey method is an adequate substitute for a complete X-ray examination of the chest. The purpose of a survey is to segregate as accurately as possible those subjects whose chests are normal and those subjects who should be referred to a roentgenologist for a complete examination because of suspicious shadows seen by the physician who conducts the survey.

THE JOURNAL

OF THE

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W. R. BROOKSHER, M. D., Editor

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EDITORIALS

THE WOMEN'S FIELD ARMY

The Women's Field Army of the American Society for the Control of Cancer is sponsored in Arkansas by the Auxiliary to the Arkansas Medical Society on request of the Committee on Control of Cancer of the Arkansas Medical Society and is approved by action of the House of Delegates. The state commander is Mrs. S. J. Wolfermann, 1109 Adelaide Avenue, Fort Smith, assisted by vice-commanders in each Councilor District.

The enlistment campaign for membership in the Women's Field Army will open in April. Membership is one dollar of which amount seventy per cent remains in Arkansas and thirty per cent is sent to the national organization. With these funds, the Committee on Cancer Control of the Society is enabled to continue and widen its educational activities throughout the state in an effort to reduce the mortality from cancer.

Individual members and county societies are urged to give full support and cooperation to the campaign, assisting the Army to obtain as large a membership for 1941 as is possible. More complete information will be gladly furnished by the state commander, or by Dr. Fred H. Krock, 1425 North 11th Street, Fort Smith, Chairman, Committee on Cancer Control.

THE ANNUAL SESSION

This issue of The Journal contains the preliminary program for the Sixty-sixth Annual Session to be held at the Marion Hotel, Little Rock, April 14th, 15th and 16th. The Committee on Scientific Work has arranged a program of merit, one which should appeal to the general membership and which should prove of much interest to all who attend. The various committees of the Society have worked diligently during the past year and will make reports of their activities to the House of Delegates. Attention is directed to the annual meetings of the House of Delegates which are the business sessions of the Society. At these meetings general policies and plans of the Society are presented for discussion and approved or disapproved in each instance. Members interested in the progress of medicine and of medical practice in Arkansas should take a more active part in these sessions. Confusion has arisen in the past because actions of the House of Delegates were not fully understood by the membership at large. This can be avoided by a more general attendance at the sessions of the House of Delegates and by reading the full report of its proceedings as later published in The Journal.

The Society will have as its honored guest Dr. Nathan B. Van Etten, New York, President of the American Medical Association, who will address both the afternoon general session of the Society and the evening public meeting, April 14th. Other distinguished guests who will appear on the scientific programs are W. E. Sauer, Saint Louis; Orval Withers, Kansas City; Daniel L. Sexton, Saint Louis; W. E. Acree, Greenville, Mississippi, and Kenneth Phillips, Miami. There is a full complement of papers from members of the Society, all of which promise much of scientific interest.

The Pulaski County Medical Society is making plans for diversified entertainment which will appeal to the social side of the annual meeting. You will be expected.

PREPAREDNESS AND THE PROFESSION

At a conference last September of representatives from the state medical societies with officers of the military services of the United States, full cooperation was mutually promised in the matter of medical preparedness. Among the matters specially delegated to state and county medical societies was the immediate problem of making surveys of the medical manpower of the respective localities in order that it might be determined which physicians could be spared from civilian practice in order to enter military medical service. Despite repeated effort, the response to this great undertaking has been most laggard within the state. In a few counties, as yet, no committee on medical preparedness has been appointed. In many counties, no report of a survey of the physicians has reached the state secretary. These committees have a vital part to play in medical preparedness and it must be realized that the time element is rapidly becoming shorter. Assurance has been given by government officials that, to the limits of their abilities, the decisions of the local preparedness committees will be respected, and that increments to the military medical personnel will be made only from those physicians whose services, it is felt, the community can spare for the emergency. Should war enter the picture, it becomes the further duty of the county committees on preparedness to cooperate in the even greater need for medical officers by taking such steps as may seem feasible to provide the desired quota from a given county. Physicians are surely as patriotic as any class; the need exists now for prompt action in these respects by the county committees.

EDITORIAL COMMENT

HOTEL RESERVATIONS

Members who plan to attend the Annual Session in Little Rock, April 14th-16th, are again urged to make advance hotel reservations. Hotel space is most limited at Little Rock due to activities at Camp Robinson and it is doubtful if those members who have not assured themselves of accommodations in advance will find room space readily. The hotels have promised to care for our members to the limit of their capacities. Make your reservation today!

HONOR ROLL

The following county medical societies made remittance to cover one hundred per cent of their 1940 membership prior to the constitutional date of March 1st, 1941:

BRADLEY	LITTLE RIVER
CLAY	MONROE
COLUMBIA	NEVADA
DREW	OUACHITA
GRANT	PHILLIPS
HEMPSTEAD	SEARCY
JACKSON	SEVIER
JOHNSON	WASHINGTON
LINCOLN	WHITE

RESOLUTION

God has called him and his work here is finished.

It is with deepest sorrow we mourn the loss of our dear friend and member of the Sebastian County Medical Society.

He dedicated his life to that which seemed nearest his heart. His heart was in his work.

When we heard of his death we realized and knew he had spent his life in service, for it mattered not when he was called, he went about doing good and only when he was called up higher did he lay down his work.

His service is ended. He spent his life in helping humanity and the man who does that most surely will have his reward in the hereafter.

WHEREFORE, BE IT RESOLVED, that in the passing of Dr. B. Wayne Freer this society has lost one of its most valuable and lovable members, whose conduct and ethics were always in accord with the medical profession.

Be it further resolved that the secretary be instructed to enter this resolution upon the permanent records of the Society and that a copy of this resolution be sent to the family of our departed brother, as evidence of the respect and esteem in which he was held by his fellow doctors and as a token of our sympathy in their bereavement.

Dated this 5th day of February, 1941.

DR. H. H. SMITH,
DR. JIM JOHNSON,
DR. C. H. KENNEDY.

Preliminary Program and Announcements

OF THE

SIXTY-SIXTH ANNUAL SESSION OF THE

ARKANSAS MEDICAL SOCIETY

LITTLE ROCK

APRIL 14, 15, 16, 1941

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W. R. BROOKSHER, Secretary, Fort Smith.

COUNCILORS AND COUNCILOR DISTRICTS

R. B. Robins, Camden, Chairman.
Euclid Smith, Hot Springs National Park, Secretary.

FIRST DISTRICT—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph counties. Councilor, F. D. Smith, Blytheville. Term of office expires 1941.

SECOND DISTRICT—Cleburne, Fulton, Independence, Izard, Jackson, Sharp, Stone and White counties. Councilor, L. T. Evans, Batesville. Term of office expires 1942.

THIRD DISTRICT—Arkansas, Cross, Lee, Monroe, Phillips, Prairie, St. Francis and Woodruff counties. Councilor, J. O. Rush, Forrest City. Term of office expires 1941.

FOURTH DISTRICT—Ashley, Bradley, Chicot, Cleveland, Desha, Drew, Jefferson and Lincoln counties. Councilor, S. W. Douglas, Eudora. Term of office expires 1942.

FIFTH DISTRICT—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union counties. Councilor, R. B. Robins, Camden. Term of office expires 1941.

SIXTH DISTRICT—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier counties. Councilor, H. E. Murry, Texarkana. Term of office expires 1942.

SEVENTH DISTRICT—Clark, Garland, Hot Spring, Montgomery and Saline counties. Councilor, Euclid Smith, Hot Springs National Park. Term of office expires 1941.

EIGHTH DISTRICT—Conway, Faulkner, Grant, Lonoke, Perry, Pope, Pulaski, Van Buren and Yell counties. Councilor, F. A. Corn, Jr., Lonoke. Term of office expires 1942.

NINTH DISTRICT—Baxter, Boone, Carroll, Marion, Newton and Searcy counties. Councilor, J. F. John, Eureka Springs. Term of office expires 1941.

TENTH DISTRICT—Benton, Crawford, Franklin, Johnson, Logan, Madison, Sebastian, Scott and Washington counties. Councilor, Clyde McNeil, Rogers. Term of office expires 1942.

STANDING COMMITTEES

(Appointments expire with annual session of the year indicated.)

SCIENTIFIC WORK—Euclid Smith, Hot Springs National Park, Chairman (1943); R. B. Robins, Camden (1942); E. C. Moulton, Fort Smith (1941); W. R. Brooksher, Fort Smith (ex-officio).

MEDICAL LEGISLATION—Jos. F. Shuffield, Little Rock, Chairman (1943); C. W. Dixon, Gould (1943); Stanley M. Gates, Monticello (1943); Euclid Smith, Hot Springs National Park (1942); W. G. Hodges, Malvern (1942); M. L. Norwood, Lockesburg (1941); W. G. Eberle, Fort Smith (1941).

HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Little Rock, Chairman (1943); M. C. Crandall, Wilmot (1943); C. J. Steed, Gurdon (1942); J. B. Askew, Batesville (1942); E. J. Munn, El Dorado (1941); H. Fay H. Jones, Little Rock (1941).

MEDICAL EDUCATION AND HOSPITALS—S. J. Allbright, Searcy, Chairman (1942); J. W. Amis, Fort Smith (1943); Alan G. Cazort, Little Rock (1941).

PUBLIC RELATIONS—W. T. Wootton, Hot Springs National Park, Chairman (1942); H. A. Rands, Dumas (1943); G. R. Siegel, Clarksville (1941).

MEDICAL ECONOMICS—C. E. Dungan, Augusta, Chairman (1943); J. H. Hellums, Dumas (1943); J. B. Hesterly, Prescott (1942); F. A. Corn, Jr., Lonoke (1941); A. F. Hoge, Fort Smith (1942); Paul Mahoney, Little Rock (1942).

SCIENTIFIC EXHIBIT—Sam Phillips, Little Rock, Chairman (1943); C. S. Moss, Hot Springs National Park (1941); G. G. Woods, Huntington (1942); Lawrence Zell, Little Rock (1943).

NECROLOGY—Thos. Douglas, Ozark, Chairman (1943); L. T. Evans, Batesville (1941); C. A. Archer, DeQueen (1942).

CANCER CONTROL—Fred H. Krock, Fort Smith, Chairman (1943); J. S. Stell, Hot Springs National Park (1942); L. M. Smith, Russellville (1941); Jeff Baggett, Prairie Grove (1942); Vincent O. Lesh, Fayetteville (1943).

SPECIAL COMMITTEES

MATERNAL AND CHILD WELFARE—S. A. Thompson, Camden, Chairman; Don Smith, Hope; R. D. Dickens, Monticello; Charles Wallis, Little Rock; J. H. Fowler, Harrison; Marion B. Leverett, McGehee; L. C. Barnes, Hamburg; Earle H. Hunt, Clarksville; C. B. Billingsley, Fort Smith; J. W. Branch, Hope; Clyde D. Rodgers, Little Rock; W. A. Snodgrass, Jr., Pine Bluff; E. C. McMullen, Pine Bluff.

HEART—A. G. Sullivan, Hot Springs National Park, Chairman; A. A. Blair, Fort Smith; O. C. Melson, Little Rock; John N. Compton, Little Rock.

CONTROL OF SYPHILIS—Louie G. Martin, Hot Springs National Park, Chairman; D. W. Goldstein, Fort Smith; L. F. Barrier, Little Rock; W. J. Hunt, Warren.

POSTGRADUATE STUDY—D. A. Rhinehart, Little Rock, Chairman; Jos. F. Shuffield, Little Rock, Secretary; R. R. Kirkpatrick, Texarkana; E. E. Barlow, Dermott; J. P. Clemens, Stephens; C. L. McNeil, Rogers; M. C. Hawkins, Jr., Searcy; J. P. Price, Monticello; Rufus Martin, Warren; J. H. Burge, Lake Village; C. S. Holt, Fort Smith; H. W. Hundling, Little Rock; L. J. Kosminsky, Texarkana; Earle H. Hunt, Clarksville; H. King Wade, Hot Springs National Park; Virgil Payne, Pine Bluff.

AUXILIARY—A. S. Buchanan, Prescott, Chairman; E. C. Moulton, Fort Smith; O. J. T. Johnston, Batesville.

STUDY OF MIDWIFERY—J. B. Jameson, Camden, Chairman; Fount Richardson, Fayetteville; J. M. Lemons, Pine Bluff.

LIAISON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—D. T. Hyatt, Little Rock, Chairman; A. C. Shipp, Little Rock; H. A. Stroud, Jonesboro; Guy Hodges, Rogers; E. E. Barlow, Dermott.

INDUSTRIAL HEALTH—E. E. Barlow, Dermott, Chairman; M. E. McCaskill, Little Rock; M. C. Hawkins, Jr., Searcy; M. E. Foster, Fort Smith; H. A. Stroud, Jonesboro.

MENTAL HYGIENE—A. C. Kolb, Hope, Chairman; Geo. B. Fletcher, Hot Springs National Park; Pat Murphey, Little Rock.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY—Frank Vinsonhale, Little Rock, Chairman; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahoney, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan, Prescott.

LOCAL COMMITTEES

Pulaski County Medical Society

Hoyt R. Allen, General Chairman

ENTERTAINMENT—Ellery C. Gay, Chairman; B. P. Briggs, Harvey Shipp, J. Donald Hayes, R. T. Smith, Estes Allen, Raymond C. Cook, Hoyt R. Allen.

COMMERCIAL EXHIBITS—Hoyt R. Allen, Council Representative and Chairman.

SCIENTIFIC EXHIBITS—Sam Phillips, Chairman; Dan Harding, R. E. McLochlin.

ARRANGEMENTS—Jerome S. Levy, Chairman; Alan Cazor, Hoyt Choate, Carl Rosenbaum, J. K. Donaldson.

RECEPTION—T. Duel Brown, Chairman; C. C. Reed, Jr., Horace Fowler, Randolph Smith.

MEMORIAL—Frank Vinsonhale, Chairman; W. A. Snodgrass, Jos. F. Shuffield.

GOLF—O. C. Melson, Chairman; R. J. Calcote, M. J. Kilbury, F. Walter Carruthers.

PUBLICITY—D. A. Rhinehart, Chairman; Paul Mahoney, H. Fay H. Jones.

TRANSPORTATION—Fred W. Harris, Chairman; Glenn Johnson.

HOTELS—Henry G. Hollenberg.

FINANCE—Clyde D. Rodgers, Chairman; Bryce Cummins, Horace Fowler, Doyle Fulmer, J. Donald Hayes, Jack Agar, John Roberts, B. J. Reaves, Fletcher Watson, John Smith.

ANNOUNCEMENTS

REGISTRATION

The registration desk will be located in the lobby of the Hotel Marion and will be open from 8:00 A. M. to 5:00 P. M., April 14th and 15th. The desk will also be open Sunday afternoon, April 13th, from 3:00 to 5:00 P. M. and April 16th, from 8:00 A. M. to 1:30 P. M. Delegates are requested to register as early as possible, presenting credentials at the time of registration. Members and visitors are also requested to register and receive the official badge and program. Admission to all sessions will be by badge. Bring your 1941 membership card to facilitate registration. Members of the American Medical Association from any state may register as guests.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society, including the Past-Presidents, will meet at noon each day in Private Dining Room, mezzanine floor, Hotel Marion, immediately following the adjournment of the morning session.

PAST-PRESIDENTS' BREAKFAST

The Past-Presidents of the Society will convene in annual breakfast session Wednesday, April 16th, at 7:30 A. M. Private Dining Room, mezzanine floor, Hotel Marion.

GOLF

Tournament play for the H. King Wade trophy will be held at the Little Rock Country Club, April 15th and 16th. In addition to this trophy, several other prizes have been provided. Further announcements will be made during the session.

Announcement has been received of the following reunions, further details of which will be given during the sessions.

Alumni Association of the University of Arkansas School of Medicine, Monday evening, April 14th.

ARKANSAS STATE PEDIATRIC SOCIETY

The Arkansas State Pediatric Society will meet at 10:00 A. M., Monday, April 16th, Marion Hotel.

PROGRAM

HOUSE OF DELEGATES

First Meeting, Hotel Marion, April 14th, 9:00 A. M.

Meeting called to Order by H. T. Smith, President.
 Calling Roll of Delegates.
 Report of Credentials Committee.
 Introduction of Fraternal Delegates.
 Adoption of Minutes of the Sixty-fifth Annual Session as published in the June, 1940, issue of The Journal of the Arkansas Medical Society.
 Appointment of Reference Committee.
 President's Address to the House of Delegates.

REPORT OF COMMITTEES

SCIENTIFIC WORK—Euclid Smith, Chairman.
 MEDICAL LEGISLATION—Jos. F. Shuffield, Chairman.
 HEALTH AND PUBLIC INSTRUCTION—W. B. Grayson, Chairman.
 MEDICAL EDUCATION AND HOSPITALS—S. J. Allbright, Chairman.
 PUBLIC RELATIONS—W. T. Wootton, Chairman.
 MEDICAL ECONOMICS—C. E. Dungan, Chairman.
 SCIENTIFIC EXHIBIT—Sam Phillips, Chairman.
 NECROLOGY—Thos. Douglass, Chairman.
 CANCER CONTROL—Fred H. Krock, Chairman.
 HEART—A. G. Sullivan, chairman.
 STUDY OF MIDWIFERY—J. B. Jameson, Chairman.
 MATERNAL WELFARE—S. A. Thompson, Chairman.
 POSTGRADUATE STUDY—D. A. Rhinehart, Chairman.
 AUXILIARY—A. S. Buchanan, Chairman.
 CONTROL OF SYPHILIS—Louie G. Martin, Chairman.
 HISTORY OF ARKANSAS MEDICAL SOCIETY—Frank Vinsonhaler, Chairman.
 LIAISON WITH ARKANSAS TUBERCULOSIS ASSOCIATION—D. T. Hyatt, Chairman.
 INDUSTRIAL HEALTH—E. E. Barlow, Chairman.
 MENTAL HYGIENE—A. C. Kolb, Chairman.
 REPORT OF THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY—D. L. Owens, Secretary.
 REPORT OF DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION—E. E. Barlow.
 REPORT OF THE COUNCIL—R. B. Robins, Chairman.
 REPORT OF THE TREASURER—R. J. Calcote.
 REPORT OF THE SECRETARY—W. R. Brooksher.
 REPORT OF COUNSEL—Hon. Peter A. Deisch.
 REPORT OF FRATERNAL DELEGATES.
 NEW BUSINESS.
 SELECTION OF NOMINATING COMMITTEE.
 SELECTION TO FILL VACANCIES ON THE STATE MEDICAL BOARD OF THE ARKANSAS MEDICAL SOCIETY. Vacancies occur during 1941 in the following congressional districts:
 Second—Incumbent, L. T. Evans, Batesville, not eligible to reappointment.
 Third—Incumbent, D. L. Owens, Harrison, eligible to reappointment.
 Sixth—Incumbent, E. A. Callahan, Carlisle, eligible to reappointment.
 Seventh—Incumbent, D. E. White, El Dorado, eligible to reappointment.

SCIENTIFIC SESSION

MONDAY, APRIL 14TH, 1:30 P. M.

CALLING THE SOCIETY TO ORDER—H. T. Smith, President.
 INVOCATION—Rabbi Ira E. Sanders, Congregation B'Nai Israel.
 ADDRESS OF WELCOME—Hon. C. E. Moyer, Mayor, Little Rock.
 ADDRESS OF WELCOME ON BEHALF OF THE PULASKI COUNTY MEDICAL SOCIETY—E. H. White, President.
 RESPONSE ON BEHALF OF THE ARKANSAS MEDICAL SOCIETY—Roy I. Millard, Russellville.
 PRESIDENT'S ANNUAL ADDRESS—H. T. Smith, McGehee.
 "Fitness for National Emergency," Nathan B. Van Etten, President, American Medical Association, New York.
 "Significance of Cough as a Symptom," O. C. Melson, Little Rock.
 "The Surgical Treatment of Hyperthyroidism (motion picture), Geo. V. Lewis, Little Rock.
 "A Resume of Fever Therapy in the Management of Syphilis," Kenneth Phillips, Miami, Florida.
 "Hypertension," C. H. Finney, Fort Smith.
 "The Nature of Thyroid Disorders," J. Harry Hayes, Little Rock.

PUBLIC MEETING

MONDAY, APRIL 14TH, 8:00 P. M.

Robinson Memorial Auditorium

CALLING MEETING TO ORDER—Dr. E. H. White, President, Pulaski County Medical Society.
 INVOCATION—Very Rev. Msgr. John J. Healy, Diocesan Director of Catholic Hospitals, Little Rock.
 INTRODUCTION OF PRESIDENT OF THE ARKANSAS MEDICAL SOCIETY—Dr. H. T. Smith, McGehee.
 ADDRESS—Mrs. Arthur A. Herold, Shreveport, Louisiana, Legislative Chairman, Woman's Auxiliary to the American Medical Association.
 "American Health as Related to National Defense," Dr. N. B. Van Etten, New York, President, American Medical Association.
 BENEDICTION—Rev. R. D. Adams, First Presbyterian Church, Little Rock.

MEMORIAL SESSION

TUESDAY, APRIL 15TH, 8:00 A. M.

IN MEMORIAM

Caleb Ewin Witt, Little Rock, April 23, 1940.
 Franklin Pierce Vines, El Dorado, April 29, 1940.
 Francis M. Reed, Turrell, May 6, 1940.
 William Lee Patterson, El Dorado, May 19, 1940.
 William T. McDonald, Naylor, May 26, 1940.
 Wayne Neal Freemyer, Little Rock, May 30, 1940.
 Raymond T. Smith, Fort Smith, June 2, 1940.
 Andrew R. Howell, North Little Rock, June 19, 1940.
 Jacob S. Thompson, Stephens, July 10, 1940.
 Charles R. Teeter, Russellville, July 13, 1940.
 John Thompson Altman, Jonesboro, July 17, 1940.
 Edward E. Carter, Arkadelphia, August 7, 1940.
 John H. Murphy, Opal, August 14, 1941.
 Hermann J. G. Koobs, Rogers, September 3, 1940.
 Harry Lee White, Rondo, September 19, 1940.

Samuel Augustus Scott, Eudora, October 14, 1940.
 Lee Edwin Biles, Augusta, October 15, 1940.
 Adolphus G. Clyne, Paragould, October 21, 1940.
 Sterling Price Bond, Little Rock, December 5, 1940.
 Harry Hansel Preston, Hot Springs, December 8, 1940.
 O. K. Hukill, Egypt, December 14, 1940.
 Alex F. Williams, Cornerville, December 29, 1940.
 Bart Wayne Freer, Fort Smith, December 29, 1940.
 Paul Hamilton Phillips, Ashdown, December 30, 1940.
 Thomas Joe Stewart, Wynne, January 7, 1941.
 Henry Herbert Darnall, Fulton, February 11, 1941.
 Isaac M. Huskey, Cave City, February 26, 1941.
 William J. Robinson, Portia, March 11, 1941.

SCIENTIFIC SESSION

TUESDAY, APRIL 15TH, 9:30 A. M.

- "Hypertension Associated with Unilateral Renal Disease: Case Report," Carl Wilson, Fort Smith.
 "The Bedside Diagnosis of Cardiac Arrhythmias," Driver Rowland, Hot Springs National Park.
 "A Vaccine for Epidemic Influenza: A Preliminary Report," Frank Acree, Greenville, Mississippi.
 "Pain and the Menstrual Cycle," Jos. H. Sanderlin, Little Rock.
 "The Control of Estrogenic Therapy During Menopause with Vaginal Smears," Julius H. Hellums, Dumas.
 "Contraception Technique and Medical Indications," M. C. Hawkins, Jr., Searcy.

SCIENTIFIC SESSION

TUESDAY, APRIL 15TH, 1:30 P. M.

- "Vincent's Angina," J. F. Lewis, Fayetteville.
 "Endocrinology in General Practice," Daniel L. Sexton, Saint Louis.
 "A Satisfactory Suprapubic Cystotomy (motion picture), Grady W. Reagan and John N. Roberts, Little Rock.
 "Cancer of the Larynx" (motion picture), W. E. Sauer, Saint Louis.
 "Treatment of Intratrochanteric Fractures of the Femur" (lantern slide demonstration), F. Walter Carruthers, Little Rock.
 "What Can We Do for the Patient With Arthritis?" Leon E. King, Hot Springs National Park.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

TUESDAY, APRIL 15TH, 9:00 A. M.

Room 212, Mezzanine Floor, Hotel Marion

- CHAIRMAN—L. Gardner, Russellville.
 VICE-CHAIRMAN—R. R. Kirkpatrick.
 SECRETARY-TREASURER—Raymond C. Cook, Little Rock.
 CENSOR—K. W. Cosgrove, Little Rock.
 "Intra-nasal Tear Sac Operation," W. E. Sauer, Saint Louis.
 "Treatment of the More Common Forms of Ulceration of the Cornea," Ralph O. Rychenor, Memphis.
 Business Session.
 Luncheon with round table discussion following the program.

ENTERTAINMENT

TUESDAY EVENING, APRIL 16TH

- Banquet Session, 6:30 P. M.
 Reception and Dance, 9:00 P. M.

SCIENTIFIC SESSION

WEDNESDAY, APRIL 16TH, 9:00 A. M.

- "Geriatrics," R. H. Johnson, Clarksville.
 "Sinus Disease Is Curable," Virgil L. Payne, Pine Bluff.
 "Replacement Therapy of Gonadotropics (Female)," G. R. Siegel, Clarksville.
 "Caudal Anesthesia in Proctologic Surgery," H. A. Causey, Pine Bluff.
 "Bronchial Asthma: Clinical Types and Treatment" (lantern slide demonstration), Orval R. Withers, Kansas City.
 "Regional Enteritis: Summary: Case Report," J. B. Jameson, Camden.
 "Alcoholism: A Public Health Problem," A. C. Kolb, Hope.

HOUSE OF DELEGATES

WEDNESDAY, APRIL 16TH, 1:30 P. M.

- CALLING THE MEETING TO ORDER—H. T. Smith, President.
 ROLL CALL.
 REPORT OF NOMINATING COMMITTEE.
 ELECTION OF OFFICERS.
 President-Elect.
 First Vice-President.
 Second Vice-President.
 Third Vice-President.
 Treasurer.
 Secretary.
 Five Councilors.
 Delegate to the American Medical Association.
 Alternate to the American Medical Association.
 REPORT OF THE REFERENCE COMMITTEE.
 REPORT OF COMMITTEES.
 NEW BUSINESS.
 ADJOURNMENT.

FINAL GENERAL SESSION

WEDNESDAY, APRIL 16TH
 (Immediately after adjournment of the House of Delegates)

- CALLING THE MEETING TO ORDER—H. T. Smith, President.
 UNFINISHED BUSINESS.
 PRESENTATION OF PRESIDENT H. FAY H. JONES.
 PRESENTATION OF THE PRESIDENT-ELECT.
 NEW BUSINESS.
 SELECTION OF PLACE OF NEXT MEETING.
 ADJOURNMENT SINE DIE.

PROCEEDINGS OF SOCIETIES

Monroe County Medical Society has elected the following officers: President, E. D. McKnight, Brinkley; Vice-President, W. H. Martin, Holly Grove; Secretary-Treasurer, W. L. Boswell, Clarendon; Delegate, M. L. Dalton, Brinkley, and Alternate, C. H. McKnight.

Lee County Medical Society has elected the following officers: President, C. W. Chaffin, Moro; Secretary-Treasurer, N. C. Hodge, Marianna; Delegate, C. W. Chaffin, and Alternate, Mac McLendon, Marianna.

Cleveland County Medical Society has elected the following officers: President, Junius Ruth, Rison; Secretary-Treasurer, W. G. Hancock, Rison; Delegate, Junius Ruth, and Alternate, W. G. Hancock.

The Ouachita County Medical Society met in regular monthly session March 6th, at the Camden Hospital. The following program was rendered: "Newer Knowledge in Diabetes," Roy Baskitt, Texarkana, and "Carcinoma of the Large Bowel," W. Decker Smith, Texarkana.

R. B. Robins, Secretary.

Howard-Pike County Medical Society has elected the following officers: President, E. V. Dildy, Nashville; Vice-President, W. M. Gibson, Nashville; Secretary-Treasurer, H. H. Holt, Nashville; Delegate, J. S. Hopkins, Nashville, and Alternate, T. F. Alford, Murfreesboro.

Desha County Medical Society has elected the following officers: President, C. H. Kimbro, Tillar, and Secretary-Treasurer, Gibbs, Biscoe, Dumas.

Crawford County Medical Society has elected the following officers: President, J. M. Stewart, Van Buren; Vice-President, B. B. Bruce, Alma, and Secretary-Treasurer, J. L. Post, Van Buren.

Lafayette County Medical Society has elected the following officers: President, F. E. Baker,

Stamps; Secretary-Treasurer, F. W. Youmans, Lewisville; Delegate, A. W. Keith, Stamps, and Alternate, J. F. McKnight, Bradley.

The Benton County Medical Society met in dinner session at Bentonville, March 13th for the following program: "Case Report," G. A. Hughes, and a symposium on "The Sulfanilamide Drugs in Respiratory Infections," led by Guy Hodges.

M. W. Chastain, Secretary.

White County Medical Society has elected the following officers: President, M. C. Hawkins, Jr., Searcy; Vice-President, A. J. Dunklin; Secretary-Treasurer, S. J. Allbright, Searcy; Delegate, D. W. Sloan, Beebe, and Alternate, Hugh Mobley.

The Mississippi County Medical Society was addressed March 4th by R. Ching, Memphis, "Use of Sulfanilamide and the Newer Derivatives in General Practice," and Dr. Bethay, Memphis, "Hemolytic Anemia."

F. D. Smith, Secretary.

Drs. E. Lloyd Wilbur and Paul C. Eschweiler, Little Rock, addressed the Sebastian County Medical Society, March 11th, on "Therapy of Anemias Determined by Pathogenesis and Classification."

W. F. Adams, Secretary.

OBITUARY

ISAAC M. HUSKEY, age 59, of Cave City, died February 26th of coronary occlusion. The only physician in Cave City, he was most active in civic interests of the community and was a member of the First Methodist Church and of the Cave City lodge of Masons. For many years he had been a member of the Independence County Medical Society and was vice-president at the time of his death. Surviving relatives are his wife, a son and two daughters.

PERSONALS AND NEWS ITEMS

Ira W. Ellis, Monette, received a table radio recently for the most outstanding work in the Craighead-Poinsett County Medical Society in 1940. The award was based upon attendance, interest in meetings, willingness to cooperate in matters concerning the group and general interest.

F. Walter Carruthers, Little Rock, addressed the Fifth District Nurses' Meeting at Little Rock recently on "The Treatment of Fractures of the Pelvis."

A. S. Buchanan, Prescott, has moved his office to the Cora Donnell Hospital.

Joe F. Rushton and Sanford Monroe have erected a new clinic building at Magnolia.

St. Anthony's Hospital, Morrilton, has elected the following staff officers: Chief, H. E. Mobley; Vice-Chief, C. E. Etheridge.

W. T. Wootton, Hot Springs National Park, has been elected vice-president of the Men's Garden Club.

W. J. Schwarz, Lake Village, has been appointed district ophthalmologist to the state welfare department.

John L. Ruff, formerly medical director at Ozark, has been transferred to Searcy.

S. P. Cromer, Little Rock, recently addressed the pre-medical fraternity, Chi Beta Phi, at Hendrix College, Conway.

RANDOM THOUGHTS OF THE SECRETARY

February 26th. The Women's Field Army confers today and flatters Krock, Goldstein and us by asking for suggestions, we well knowing that they are going to put it over from an abundance of ideas all their own. The conference brings to town Madame President-Elect Churchill, our house guest, and we begin to understand why Calvin gets places.

February 28th. With the Everett Fosters for dinner where a most unusual delicacy, smoked salmon, intrigues us but leads Wolfermann and Eberle to get out Foster's fishing appurtenances and indulge in much technical discussion.

March 9th. Once again with the youngster to Tulsa's ice rink, becoming of the opinion that one or two more visits might bring our courage to the point where we would don ice skates, yet not displeased that no one urges us to take the first step and the ultimate falls.

March 11th. Just why we thought we might be of help to the Clarksville boys in the conduct of a NYA group examination becomes a source of embarrassment to us as we watch these fellows really put one over. Gladdened over Earle Hunt's gambling effort which leaves us temporarily in the possession of eighty cents of Johnson county money, later left because of a flat tire with the local filling station. This day marked on the calendar, too, because Elizabeth Wolfermann and Peggy, devotees of the sport of catching a train thirty seconds before departure, miss for the first time, and step off the bus at Clarksville, seeking a ride home, loath to discuss the incident, also an event in the lives of Sid and us.

March 12th. Gathering for another gay Franklin County Society banquet which Douglass, Porter, Gibbons, Bollinger and Pillstrom out on with all the finishing touches. Ike Bollinger, from out Henryetta way where the Greeks got their quota, takes the floor away from Earle Hunt and most of us make the resolution that these Oklahomans will have to stay away from those functions where Earle has been the dominant story-teller for these many years.

HIS FIRST CEREAL FEEDING

The baby's first solid food always excites the parent's interest. Will he cry? Will he spit it up? Will he try to swallow the spoon? Far more important than the child's "cute" reactions is the fact that figuratively and physiologically, the little fellow is just beginning to eat like a man.

It is a fortunate provision of Nature that at the time the infant is ready to receive the nutritional benefits of cereal, his taste is unspoiled by sweets, pastry, condiments, tobacco, alcohol and other things to which adult palates and constitutions have become conditioned.

Many a parent, with limited knowledge of nutrition, attempts to do the baby's tasting for him. Partial to sweets, the mother sweetens her child's cereal. Disliking cod liver oil, she wrinkles her nose and sighs: "Poor child, to have to take such awful stuff!" The child is quick to learn by example, and soon may become poor indeed—in nutrition, as well as in mental habits and psychological adjustment.

Appreciating the importance and difficulties of the physician's problem in establishing and maintaining good eating habits, Mead Johnson & Company continue to supply Pablum in its natural form. No sugar is added. There is no corresponding dilution of the present protein, mineral and vitamin content of Pablum. Is this not worth while?

**PRELIMINARY PROGRAM
AND ANNOUNCEMENTS
WOMAN'S AUXILIARY
TO THE
ARKANSAS MEDICAL SOCIETY
SEVENTEENTH ANNUAL MEETING
LITTLE ROCK, ARKANSAS**

**APRIL 14, 15 AND 16, 1941
HEADQUARTERS: HOTEL MARION**

OFFICERS

PRESIDENT—Mrs. Alfred Hathcock, Fayetteville.
PRESIDENT-ELECT—Mrs. Calvin Churchill, Batesville.
FIRST VICE-PRESIDENT—Mrs. E. D. McKnight, Brinkley.
SECOND VICE-PRESIDENT—Mrs. L. G. Fincher, El Dorado.
THIRD VICE-PRESIDENT—Mrs. Ralph Cross, Texarkana.
FOURTH VICE-PRESIDENT—Mrs. Virgil Payne, Pine Bluff.
SECRETARY—Mrs. Fount Richardson, Fayetteville.
TREASURER—Mrs. B. A. Bennett, Little Rock.
PUBLICITY SECRETARY—Mrs. H. E. Murry, Texarkana.

ADVISORY BOARD

Dr. A. S. Buchanan, Prescott.
Dr. E. C. Moulton, Fort Smith.
Dr. O. J. T. Johnston, Batesville.

COUNCILORS

Mrs. Marcus T. Smith, Conway.
Mrs. J. T. McLain, Gurdon.
Mrs. C. W. Jones, Benton.
Mrs. J. B. Crawford, Little Rock.
Mrs. C. E. Kitchens, DeQueen.

COUNCILWOMAN TO THE WOMEN'S AUXILIARY
TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs.
W. Turner Wootton, Hot Springs.

COMMITTEE CHAIRMEN

1940-1941

ORGANIZATION—Mrs. E. D. McKnight, Brinkley.
EDUCATION AND PUBLIC HEALTH—Mrs. L. G. Fincher,
El Dorado.
ILSE F. OATES LOAN FUND—Mrs. Chas. E. Oates, Little
Rock.
HYGEIA—Mrs. Ralph Cross, Texarkana.
PUBLIC RELATIONS—Mrs. Virgil Payne, Pine Bluff.
CONSTITUTION AND BY-LAWS—Mrs. W. R. Brooksher,
Fort Smith.
MEMORIAL AND CHAPLAIN—Mrs. S. C. Fulmer, Little
Rock.
EXHIBITS—Mrs. J. B. Jameson, Camden.
ARCHIVES—Mrs. D. W. Goldstein, Fort Smith.
ESSAY CONTEST—Mrs. J. K. Sheppard, El Dorado.
LEGISLATION—Mrs. T. Duel Brown, Little Rock.

FINANCE—Mrs. B. A. Rhinehart, Little Rock.
PHYSICAL HEALTH EXAMINATION—Mrs. A. A. Blair,
Fort Smith.
DOCTOR'S DAY OBSERVANCE—Mrs. H. T. Smith, Mc-
Gehee.
JANE TODD CRAWFORD MEMORIAL—Mrs. B. V. Pow-
ell, Camden.
CANCER CONTROL—Mrs. S. J. Wolfermann, Fort Smith.
LIBRARY FUND COMMITTEE—Mrs. T. Duel Brown, Little
Rock.
CIRCULATION MANAGER OF THE BULLETIN—Mrs.
J. Murry Smith, Smackover.

DISTRICT COUNCIL WOMEN

FIRST—Mrs. H. S. Watson, Earle.
SECOND—Mrs. O. J. T. Johnston, Batesville.
THIRD—Mrs. S. A. Drennen, Stuttgart.
FOURTH—Mrs. J. H. Burge, Lake Village.
FIFTH—Mrs. R. B. Robins, Camden.
SIXTH—Mrs. R. C. Dickinson, Horatio.
SEVENTH—Mrs. D. B. Stough, Hot Springs.
EIGHTH—Mrs. L. F. Barrier, Little Rock.
NINTH—Mrs. Henry Kirby, Harrison.
TENTH—Mrs. R. H. Huntington, Fayetteville.

COUNTY PRESIDENTS

1940-1941

ARKANSAS—Mrs. S. A. Drennen, Stuttgart.
CLARK-NEVADA-HEMPSTEAD — Mrs. Jim Martindale,
Hope
CRITTENDEN—Mrs. J. T. Irby, Earl.
FRANKLIN—Mrs. W. C. Porter, Ozark.
GARLAND—Mrs. S. L. Thompson, Hot Springs.
INDEPENDENCE—Mrs. J. J. Monfort, Batesville.
JEFFERSON—Mrs. Virgil L. Payne, Pine Bluff.
JOHNSON—Mrs. J. M. Kolb, Clarksville.
LONOKE-PRAIRIE—Mrs. T. G. Porter, Hazen.
MILLER—Mrs. Joe Tyson, Texarkana.
MADISON—Mrs. Fred Youngblood, Huntsville.
MONROE—Mrs. E. D. McKnight, Brinkley.
SALINE—Mrs. C. W. Jones, Benton.
SEBASTIAN—Mrs. M. E. Foster, Fort Smith.
OUACHITA—Mrs. B. V. Powell, Camden.
PULASKI—Mrs. S. C. Fulmer, Little Rock.
WASHINGTON—Mrs. James Lewis, Fayetteville.
SEVIER—Mrs. G. L. Kimball, DeQueen.
SOUTHEAST ARKANSAS—Mrs. Chas. Dixon, Gould.
NINTH COUNCILOR DISTRICT—Mrs. Ross E. Fowler,
Harrison.
COLUMBIA—Mrs. Joe T. Rushton, Magnolia.
UNION—Mrs. J. Murry Smith, Smackover.

HONOR GUESTS

Mrs. Arthur A. Herold, Shreveport, Louisiana, National
Legislative Chairman of the Auxiliary to the American
Medical Association.
Mrs. M. Pinson Neal, Columbia, Missouri, President,
Women's Auxiliary to the Southern Medical Association.

MONDAY, APRIL 14TH, 1941

Mezzanine Floor, Hotel Marion

- 9:00 A. M.—REGISTRATION.
11:00 A. M.—EXECUTIVE BOARD MEETING.
12:00 Noon—EXECUTIVE BOARD LUNCHEON.

GENERAL SESSION

- 2:00 P. M.—OPENING OF SESSION—Mrs. S. C. Fulmer, President, Woman's Auxiliary to the Pulaski County Medical Society.
INVOCATION—Dr. Warren Johnston.
ADDRESS OF WELCOME—Mrs. R. C. Kory, Little Rock.
INTRODUCTION OF STATE PRESIDENT—Mrs. Alfred Hathcock, Fayetteville.
RESPONSE TO ADDRESS OF WELCOME—Mrs. Ralph Cross, Texarkana.
REPORTS OF OFFICERS.
REPORTS OF STATE CHAIRMAN.
INTRODUCTION OF SPECIAL GUESTS.
REPORTS OF OFFICERS.
REPORT OF THE MEETING OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION—Mrs. Fred Hames, Pine Bluff.
REPORT OF THE MEETING OF THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. W. Turner Wootton, Hot Springs National Park.
ANNOUNCEMENTS OF SPECIAL COMMITTEES.
REPORT OF THE REGISTRATION COMMITTEE.
REPORT OF THE ENTERTAINMENT COMMITTEE.

- 4:30 P. M.—TEA—At the home of Mrs. Hoyt R. Allen, 1723 North Beech.

PUBLIC MEETING

MONDAY, APRIL 14TH, 1941, 8:00 P. M.
Robinson Memorial Auditorium

- CALLING MEETING TO ORDER—Dr. E. H. White, President, Pulaski County Medical Society.
INVOCATION—Very Rev. Msgr. John J. Healy, Diocesan Director of Catholic Hospitals, Little Rock.
INTRODUCTION OF PRESIDENT OF THE ARKANSAS MEDICAL SOCIETY—Dr. H. T. Smith, McGehee.
ADDRESS—Mrs. Arthur A. Herold, Shreveport, Louisiana, Legislative Chairman, Woman's Auxiliary to the American Medical Association.
"American Health as Related to National Defense," Dr. N. B. Van Etten, New York, President, American Medical Association.
BENEDICTION—Rev. R. D. Adams, First Presbyterian Church, Little Rock.

MEMORIAL SESSION

TUESDAY, APRIL 15TH, 8:00 A. M.

IN MEMORIAM

- Mrs. R. F. White, McGehee.
Mrs. Mabel Phillips, Benton.

GENERAL SESSION

TUESDAY, APRIL 15TH, 1941

Mezzanine Floor, Hotel Marion

- 9:30 A. M.—CALLING THE MEETING TO ORDER—Mrs. Alfred Hathcock, President.
INVOCATION—Dr. Marion A. Boggs.
READING OF THE MINUTES.
ADDRESS—Dr. H. T. Smith, McGehee, President, Arkansas Medical Society.
REPORTS OF COUNTY AUXILIARIES.
REPORT OF REGISTRATION AND CREDENTIALS COMMITTEE.
GREETING FROM THE WOMAN'S AUXILIARY TO THE SOUTHERN MEDICAL ASSOCIATION—Mrs. M. Pinson Neal, President.
ELECTION OF OFFICERS.
ANNOUNCEMENT OF THE ENTERTAINMENT COMMITTEE.
1:00 P. M.—LUNCHEON—Little Rock Country Club (\$1.00). Transportation available.
TOASTMISTRESS—Mrs. S. C. Fulmer, President, Woman's Auxiliary to the Pulaski County Medical Society.
INVOCATION—Mrs. J. Palmer Sheppard.
INTRODUCTION OF PAST PRESIDENTS.
INTRODUCTION OF STATE OFFICERS.
INTRODUCTION OF WIVES OF OFFICERS OF THE ARKANSAS MEDICAL SOCIETY.
PRESIDENT'S REPORT.
ADDRESS—Mrs. Arthur A. Herold, Shreveport, Louisiana, National Legislative Chairman of the Woman's Auxiliary to the American Medical Association.
ADDRESS—Mrs. M. Pinson Neal, President, Woman's Auxiliary to the Southern Medical Association.
UNFINISHED BUSINESS.
REPORT OF COMMITTEE ON COURTESY RESOLUTIONS.
INSTALLATION OF OFFICERS—Mrs. Arthur A. Herold, Shreveport.
PRESENTATION OF GAVEL—Mrs. Alfred Hathcock.
ADDRESS OF INCOMING PRESIDENT—Mrs. Calvin A. Churchill, Batesville.
4:00 P. M.—POST-CONVENTION BOARD MEETING—Mrs. Calvin A. Churchill, Presiding.

WEDNESDAY, APRIL 16TH

- VISIT TO THE ARTS CLUB—Mrs. J. Palmer Sheppard, Hostess.
DRIVES OVER THE CITY.

LOCAL COMMITTEES

- PROGRAM—Mrs. L. F. Barrier.
REGISTRATION—Mrs. J. B. Crawford.
ENTERTAINMENT—Mrs. Estes Allen.
COURTESY—Mrs. T. Duel Brown and Mrs. A. C. Shipp.
TRANSPORTATION—Mrs. Carl Rosenbaum.
PUBLICITY—Mrs. Chas. E. Oates.
FLOWERS—Mrs. G. W. Reagan.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Dear Auxiliary Members:

With the year 1940-41 almost over, and with the fact in mind that it has been one of turmoil and uncertainty for all of us, we have forged ahead. The Medical Auxiliary has stressed many phases of the work, particularly has our superior officers, many of whom are pioneers in this work, stressed self-education. This was the idea in mind when the Women's Auxiliary to the American Medical Association made a special effort to awaken widespread interest in its activities by increasing the number of persons reading the Bulletin.

This little booklet is a successor to the "News Letter" as most of you know which for many years has kept the officers and board members acquainted with the progress of the Auxiliaries of all the states. It is published quarterly, and contains a report of conventions, places of work, inspirational messages of leaders and news of the hour in the Medical world.

It is a great help in promoting interest in local Auxiliaries especially where the program is new. Reading the Bulletin will help one to keep clearly in mind the ideals, growth, and expansion of the Auxiliary work; to ever keep abreast of the trends in the medical world, and be better able to function as members and leaders of the Auxiliaries in local, state, and national.

Every successful organization must have a compelling reason for its existence; the Bulletin carries these forces to the lay members. It will serve to increase **your** interest by increasing your knowledge. It will bring to you the plans, policies, and progress of the National Auxiliary.

With the questionable attitudes which have arisen in the past few years toward the medical profession, it is important that we keep informed as to medical trends. The scope of the Medical Auxiliary will be increased many "Hundred Fold" by extension of this valuable information.

It seems suitable **now** that each Auxiliary member should make a concerted effort to send in her subscription before the year closes. You will then have the "News" of the administration during the term of the administration, which is fitting.

If you have not sent in your subscription to date, may I again urge you to do so. Send your subscription with one dollar (\$1.00) to Mrs. H. E. Christenberry, Knoxville, Tenn.

I do appreciate the interest you have already shown and most earnestly request the cooperation of the Advisory Council, and the good will of all members of the Medical Association.

I am sincerely,

MRS. J. MURRAY SMITH,
State Circulation Manager of the Bulletin,
Smackover, Arkansas.

The Ouachita County Medical Auxiliary was entertained Thursday night in the home of Mrs. N. G. Partee, with Mrs. Partee and Mrs. S. D. McGill as hostesses for the evening.

Supper was served buffet style and the dining table

held a lovely centerpiece of white and red carnations flanked by red candles. Covers were laid for thirteen members and two guests, Mrs. Fred Hames of Pine Bluff and Mrs. John West Benton, at small tables.

A profusion of early spring flowers decorated the rooms.

Plans were discussed and made for the Cancer Control Drive and a generous contribution was made to the student loan fund sponsored by the state Auxiliary.

Mrs. Benton, who returned in December from a seven months' stay in Shanghai, China, gave a travelog on that country.

MEDICAL AUXILIARY

The Woman's Auxiliary in the Pulaski County Medical Society held its February meeting Wednesday in the senior lecture room of the University of Arkansas School of Medicine. There were thirty members and forty guests present. Mrs. W. A. Lamb, chairman of the Public Relations Committee, was in charge of the meeting and introduced Dr. E. H. White, president of the Pulaski County Medical Society. Dr. White introduced Dean Stuart P. Cromer. Dr. Cromer welcomed the members and guests, and spoke on the "Medical Student and the Draft." Mrs. Alfred Hathcock, state auxiliary president, and Mrs. Fount Richardson, state secretary, both of Fayetteville, gave talks. Mrs. Hathcock spoke on "The Priceless Heritage of the American People." Dr. H. K. Smith of McGehee, president of the State Medical Association, spoke on "Health and Success." Dr. Carl Rosenbaum showed moving pictures of clinical activities at the school. Tea was served in the senior lounge following the meeting. Hostesses at the tea were Mrs. J. C. Cunningham, Mrs. Cromer, Mrs. R. A. Bennett and Mrs. Joe Sanderlin.

Common sense for American people in problems of health was prescribed by Dr. W. W. Bauer, director of the bureau of health education of the American Medical Association, and assistant editor of Hygeia, in his concluding address Tuesday night at the Congregational church in celebration of Doctor's Day by the Bowie and Miller Medical Auxiliary.

Following his address, members of the Auxiliary entertained with an informal reception on the mezzanine floor of Hotel McCartney. Spring flowers decorated the table, where punch was served with various relishes.

Assisting in the entertainment were members of the entertainment committee, Mrs. Ralph Cross, Mrs. Roy Baskett, Mrs. Harry Murry, Mrs. William Hibbitts and Mrs. H. E. Longino, and the public relations committee, Mrs. S. A. Collom, Jr., Mrs. J. T. Robison, Mrs. W. Decker Smith, and Mrs. Reavis Pickett.

Mrs. Joe Tyson is president of the Auxiliary and Mrs. Allen Collom, Jr., was general chairman of the arrangements for Doctor's Day.

Hotel Carter will be the headquarters for the annual meeting of the Woman's Auxiliary to the American Medical Association which will be held in Cleveland, June 2-6, 1941. Requests for reservations should be sent immediately to Dr. Edward F. Kieger, chairman of the Com-

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of Acute Anterior*
URETHRITIS

(DUE TO NEISSERIA GONORRHEAE)

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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," *Am. J. Syph. Gon. & Ven. Dis.*, 23, 201 (March) 1939.

*Silver Picrate, is a definite crystalline compound of silver and picric acid. It is available in the form of crystals and soluble irritation for the preparation of solutions, suppositories, water-soluble jelly, and powder for vaginal insufflation.

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Members of the Auxiliary of the Sebastian County Medical Society went to Fayetteville March 3rd where they were invited to attend a luncheon given by the Washington County Auxiliary at the home of Mrs. Alfred Hathcock, State President, in honor of Mrs. V. E. Holcombe, Charleston, W. Va., president of the Auxiliary of the American Medical Association.

Mrs. Holcombe is making her official visit to Arkansas and is the house guest of Mrs. Hathcock. She discussed briefly auxiliary work. Ideas were for future programs exchanged by the Washington and Sebastian county auxiliaries.

The Sebastian County Medical Society Auxiliary was represented by Mrs. Sidney J. Wolfermann, Mrs. W. R. Brooksher, Jr., Mrs. Walter Eberle, Mrs. Charles T. Chamberlain, Mrs. Fred Krock, and Mrs. W. F. Rose.

Washington county members included Mrs. James Lewis, president of the hostess auxiliary; Mrs. H. H. Howze, vice president; Mrs. Loyce Hathcock, secretary; Mrs. Richard Miller, treasurer; Mrs. Jack Butt, Mrs. Robert Huntington, Mrs. Richard Henry, Mrs. W. F. Ellis, Mrs. Fount Richardson, state auxiliary secretary, and Miss Elizabeth Ellis.

Mrs. Calvin Churchill, Batesville; Mrs. Charles Becky, Huntsville, and Mrs. S. L. Levine, Mrs. H. H. Leming and Mrs. F. H. Gordon, from the faculty of the veterans' hospital also were guests.

MRS. W. F. ROSE

Publicity Chairman of the Auxiliary of
the Sebastian County Medical Society.

Dr. Fred Krock was a guest speaker at a meeting of the Auxiliary of the Sebastian County Medical Society March 10th at St. Edwards' nurses' home.

Dr. Krock spoke on cancer, in preparation for the state-wide campaign of the Women's Field Army for the Control of Cancer. The campaign, during the month of April, is under the leadership of Mrs. Sidney J. Wolfermann, state commander. Mrs. W. R. Brooksher, Jr., is state deputy commander, and Mrs. Fred Krock, vice-chairman of the tenth district.

"The American Society for the Control of Cancer, formed in 1913, was a heavily endowed organization for research," Dr. Krock said. "The Woman's Field Army was organized in 1936," the speaker continued, "for the purpose of carrying to every person in the United States life-saving information about cancer.

"Its educational activities, supervised by physicians, culminate in the month of April, designated by special act of Congress and proclaimed by the President of the United States as Cancer Control month."

The Arkansas division was organized last year, the physician said. Seventy per cent of the dollar membership is used by the state division for the purchase of educational and other materials used by the local units and for organization work over the state. Mrs. M. E. Foster presided at a business meeting at 1 o'clock. She named Mrs. D. W. Goldstein chairman of a nominating committee to select a slate of candidates for officers for the ensuing year. Other members are Mrs. W. R. Brooksher, Jr., and Mrs. Foster.

The Auxiliary voted to eliminate luncheon meetings for the next two months and contribute the luncheon money

for the negro hospital building fund. Business meetings shall be held in homes of members in the afternoon during April and May.

Auxiliary members present for Monday's meeting were Mrs. M. E. Foster, Mrs. Walter Eberle, Mrs. K. L. Kelleam, Mrs. J. S. Southard, Mrs. S. T. Stubbs, Mrs. C. H. Finney, Mrs. W. R. Brooksher, Jr., Mrs. I. Fulton Jones, Mrs. W. F. Adams, Mrs. Charles T. Chamberlain, Mrs. Fred Krock, Mrs. D. W. Goldstein, Mrs. S. J. Wolfermann, Mrs. Everett Moulton, and Mrs. W. F. Rose.

MRS. W. F. ROSE,

Publicity Chairman of the Auxiliary of
the Sebastian County Medical Society.

SAY, BUD, JUST WATCH THIS DOOR A MINUTE, HUH?

The 206th Coast Artillery today had a variation on the old Army story of the private who asked the general for a match.

Enroute from Arkansas to Fort Bliss with 400 selectees, officers of the 206th stationed one of the recruits at a doorway of the train as a guard.

Major Stanley M. Gates, medical officer, was passing through the train when the selectee stopped him with: "Say, bud, you guard this door a while. I want to go get something to eat."

Major Gates guarded the door until the selectee returned from lunch—El Paso Herald-Post, March 22, 1941.

It is not fair to measure the effectiveness of public health work entirely in terms of mortality, because much of its effectiveness actually has nothing to do with mortality but with morbidity.—Raymond Pearl, Survey, April, 1940.

It is perhaps a tragedy for humanity that the destructive lesions of tuberculosis are not visible as they are in leprosy. The transmissibility of leprosy was recognized in biblical times and isolation of the afflicted was the rule then as it is even now. The old adage which says that "what one cannot see won't hurt" has served to protect the tubercle bacillus but not its host. While the proper attack upon the control of tuberculosis is something over two thousand years late, it finally has obtained a good start and promises to do in a few decades what has required centuries for leprosy.—David W. Heusinkveld, M. D., Jour. of Med., November, 1940.

The tuberculosis sanatorium cannot expect outside employers to hire ex-patients when it is not willing to set the example. Experience justifies the employment of ex-tuberculous patients in hospitals, provided the selection is carefully made and the patient receives proper medical attention.—Max Pinner, M. D., Tuber. San. Conf. of Met. N. Y., 1941.

The American Academy of Pediatrics is sponsoring an active national campaign to protect infants and children from contact infections from servants. Routine physical examinations including an X-ray and blood test, given to all home employees, are advised by the Academy to prevent those too frequent cases of tuberculosis and other infectious diseases traced to a household employee.—Bulletin of Tuber., Institute of Chicago and Cook County, August, 1940.

The job of eradicating tuberculosis is no longer one for the shotgun but for the more selective rifle.—Louis I. Dublin, Amer. Rev. of Tuber., February, 1941.

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No. 12

THE X-RAY EXAMINATION IN ILEUS AND INTESTINAL OBSTRUCTION *

IRA H. LOCKWOOD, M. D.
Kansas City, Missouri

The mortality in intestinal obstruction continues to be high and there should be a revision of the criteria on which the diagnosis of intestinal obstruction is based. Pain, regurgitation, nausea, vomiting, constipation and abdominal distension is a syndrome that portends the beginning of the end of life for the unfortunate sufferer with bowel obstruction. Intermittent cramping, colic and pain associated with nausea and vomiting suggest acute intestinal obstruction. The clinician has been misled by the use and abuse of enemas; the bowel below the point of obstruction is physiologically well and anatomically normal and will expel an administered enema with the return of gas.

Many authors including Eliason and Johnson (1) have used the term ileus as synonymous with obstruction and have classified the condition as mechanical, dynamic and paralytic. The factors (2) most frequently concerned in the production of small intestinal obstruction are post operative adhesions, inflammatory lesions, peritoneal veils and constricting membranes. Primary malignancy is rare; secondary growth, strangulated hernias and volvulus are frequent causes. In a series (3) of small intestinal obstruction due to congenital intra-intestinal defects or to faulty rotations the diagnosis was made from the plain roentgenogram and the failure to find keratinized epithelial cells in the stools.

In 1911 Schwarz of Vienna recognized the presence of gas shadows in the small bowel and indicated their value in the diagnosis of acute bowel obstruction. Case later described the significance of these gaseous shadows. Kloiber was the first to state that the diagnosis of bowel

obstruction could be made from the presence of these shadows in the small intestines. A radiograph of the abdomen normally reveals gas in the stomach and colon. It is also present throughout the small intestines, but the intimate admixture of gas and fluid precludes the distinguishing of it from its immediate surroundings. Its demonstration in the small intestines is decidedly abnormal and indicative of the presence of a mechanism interfering with the normal rate of transit. The ladder pattern described by Case is a typical picture of bowel obstruction but need not be awaited to make the diagnosis. A visible collection of gas in the small intestines of an adult is synonymous with intestinal stasis.

In simple obstruction of the small intestines gas may be visualized within four or five hours following the onset of symptoms. When the obstruction is in the colon a variable time may elapse before gaseous evidence in the small intestines becomes visible on the radiograph. The clinical diagnosis of obstruction of the colon may be difficult. Wangenstein (4) states that with colon obstruction there is little or no vomiting but when the lesion is in the small intestines there may be frequent copious vomiting. The pattern and distribution (5) of the gas on the roentgenogram will differentiate between large and small bowel obstruction. If the lesion is in the colon it acts as a closed loop and there is little gas in the small intestines. If in doubt a barium enema should be used. It is possible to determine the degree of obstruction and in many instances to localize the site of the lesion. There are two methods of study: First, plain radiographs of the abdomen. Second, studies after the administration of an opaque media.

The plain radiograph is used in those cases in which obstruction is accompanied by the presence of gas in the small intestines. This method has the advantage of speed and simplicity which is particularly important in post operative cases with either ileus or mechanical obstruction.

* Read before the Sixty-fifth Annual Session, Arkansas Medical Society, Fort Smith, April 16, 1940.

Transabdominal projections will show an associated effusion between the coils of the intestines. Since the clinician is usually more concerned as to whether there is an obstruction than as to its exact location the plain radiograph should always be tried first in every case of suspected obstruction.

In studies made after the administration of an opaque meal it is necessary to keep in mind the physiology of the alimentary tract. Normal movement of food through the small bowel takes places in three ways—by rhythmic segmentation, pendulum movement, and peristaltic rush. Ordinarily the opaque meal begins to pass out of the stomach immediately after ingestion and in about four hours the head of the column has reached the cecum. It normally requires about twelve hours for the small bowel to empty itself. Retention at eighteen hours is a significant finding and after twenty-four is definitely pathological. If there is dilatation of the loops associated with retention a diagnosis of obstruction is possible. If complete the barium mixture is seen proximal to the point of obstruction, the bowel distended and by the character of the loops involved an idea as to the site and possibly the etiology may be obtained.

Kirsner and Miller (6) presented a review of the literature on intussusception and described the four most common types as being ileocecal, colic, enteric and ileocolic. The most frequent roentgen signs of invagination were: First, obstruction to the barium enema with a filling defect. Second, mobility of the obstruction under manipulation. Third, palpably mass. Fourth, passage of barium between the intussusception and intussusciens.

The greatest difficulty is the problem of partial obstruction. There are no gas filled loops shown on the plain radiograph that would direct attention to the pathology unless intermittent complete obstruction occurs. The points of importance are: First, the establishment of the fact that an obstruction is present. Second, its localization to a specific portion of the small or large bowel. Third, a detection of any complication which may tend to throw light on the etiology or govern the method of treatment.

The only means by which we can detect it is by the retardation of the flow of intestinal contents through the affected region. To accomplish this it is necessary to follow the barium meal through the intestinal tract, making examinations every one or two hours until the barium

passes through the small bowel. The detection of malformed loops, constant during the examination, has been the basis for diagnosis of partial obstruction. By this method incarceration of intestinal loops in hernias, peritoneal bands, tubercular peritonitis, localized exudates and tumors can be shown. A case of partial intestinal obstruction due to diverticulosis of the small intestine was reported by Hubeny and Pollack (7). At operation the obstruction was found to be due to adhesions between a diverticulum of the small bowel and adjacent small intestine.

The differentiation between the small intestinal obstructions and paralytic ileus can be made by a study of the symptoms, the physical examination and the roentgen findings. In obstruction there is an impediment to the normal passage of material through as evidenced by the colicky pain and on the radiograph by dilatation and the formation of the characteristic ladder pattern of the small bowel. There is no gas or fecal material in the distal portion of the intestines and the rectum should be collapsed. In paralytic ileus there is no mechanical occlusion to the passage of material through the intestines, merely a lack of propulsive force. On the radiograph the loops of bowel lie distended with gas. It may be present throughout both the small and large intestines without continuity of the gaseous loops and the rectum should be dilated in a similar manner as the rest of the intestines. There is no localization of the lesion.

There is a group of cases that present all the symptoms of a mechanical obstruction of an acute nature in which there is no interference with the continuity of the bowel that can be demonstrated at operation. These patients complain of intermittent cramping pain, nausea and vomiting, considerable distension, no tenderness or rigidity. At the height of the colic loud gurgling intestinal noises may be heard throughout the abdomen. Small accumulations of gas occasionally may be seen in the small intestine, the colon is greatly distended. Some of these patients have a functional bowel disturbance; constipation is a prominent factor. The essential cause of this condition is not apparent and for want of more accurate knowledge concerning these obstructive phenomena Wangensteen (8) has applied the term "spastic ileus." These cases simulate a mechanical obstruction. A barium enema will give information as to whether or not there is an organic obstructive lesion in the colon.

In the routine examination of clinically obscure abdominal complaints Oppenheimer (9) has described a condition of acute transient intestinal atony in which there is an excessive enlargement of the colon that upon repeated examinations three or four days later revealed a perfectly normal colon. The clinical signs and symptoms of these cases are vague except acute severe colicky pain.

Roentgenograms of the urinary tract made before, during and after an attack of renal colic may reveal an absence of gas before and after, whereas during the attack quantities of gas are found distending the colon and there may be some in the small intestines. These findings have been observed before, during and after retrograde pyelography. If a careful study of the gastro-intestinal tract is made the stomach is found dilated with a spasm of the pylorus. Some loops of the small intestine are dilated while others are spastically contracted. If a barium enema is given the colon will be found dilated with an absence of haustrations and spontaneous contractions will have no effect upon its ability to empty itself. Similar observations have been made in patients having persistent colicky pain due to diseases of the gall bladder.

The findings are those of dilated intestines with an increase in both length and width, disappearance of mucosal activity and deficient peristalsis. Acute atony of the colon, stomach and small intestines may occur. The rapid disappearance of the atony proves that the intestinal muscle itself is not damaged.

The local treatment (10) of intestinal obstruction consists of, first, reducing the distension of the gut proximal of the lesion; second, locating and relieving the obstruction; third, excising any gangrenous tissue devitalized by a disturbance of its blood supply. Intestinal intubation gives us a method of management which will decompress the abdomen by emptying the small intestine proximal to the obstruction. The study of the aspirated contents and injection of an opaque medium through the tube frequently makes it possible to identify the position and nature of the obstructing lesion. It cannot be too strongly emphasized that whenever interference with the mesenteric blood supply is suspected operation must continue to the treatment of immediate choice (10-12).

Active cooperation (11) between surgeon and roentgenologist is imperative of the fullest advantage of this method is to be realized. Both must share the responsibility for successful in-

tubation since the tube will not reach its destination without patience and constant attention to detail. Following decompression of the dilated bowel one may be able to demonstrate the complete alleviation of the obstruction, obviating the need for operative intervention. In other cases the actual site of the obstruction may be shown by the injection of contrast media through the tube (10-11). Small quantities, about 50 c.c., have proved sufficient in most cases.

The most obvious disadvantage (12) of intestinal intubation is the possibility of failure to recognize interference with the mesenteric blood supply. The advantages are: First, it offers a means of decompressing the dilated bowel. Second, makes it possible to safely delay surgery until the patient is in better general condition. Third, aids in accurate localization of the obstruction. Fourth, once the tube passes well into the small bowel it is possible to maintain the patient's nutrition by oral feedings which is not possible when gastric or duodenal aspiration is in progress. Decompression of the bowel is but one phase in the treatment of intestinal obstruction. Adequate supplies of fluids and salt must be furnished no matter what therapeutic measures are carried out (12).

Although obstruction and ileus can be differentiated from generalized peritonitis this is of more academic than practical importance. There are well defined criteria which afford an exact roentgenological diagnosis of peritonitis, but the findings obviously vary depending upon the duration, extent and type of infection. In the average advanced peritonitis there is a moderate degree of both small and large intestinal dilatation which rarely approaches that noted in mechanical intestinal obstruction. Due to serous exudative changes a homogeneous shadow in the flanks is visible and the normal discernible subperitoneal adipose tissue lines, as well as the adipose tissue spaces between the transversalis and internal and external oblique muscles are hazy in outline or may be obliterated due to the inflammation and exudation. Since peritonitis eventually is a causative factor of paralytic ileus, the finding of free peritoneal fluid is evidence that the primary cause was peritonitis rather than uncomplicated intestinal obstruction. Localization of fluid, especially in the appendiceal region is readily demonstrated by the trans-abdominal projection.

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NEWS ITEM

As much as we individually might be in sympathy with the "Bundles for Britain" movement, one recent phase of it hardly has our approval.

At several points in the country there has been a movement to collect the samples left by pharmaceutical detail men in physicians' offices and include them in the shipments for British Relief. This is an expensive and uncontrolled way of supplying pharmaceutical products.

Most all of the pharmaceutical manufacturers have individually donated supplies with vitamin capsules and other needed pharmaceutical products to the British Relief at no charge.

The packaging of a sample increases the cost and if these samples are collected and sent to Britain, then the purpose for which they were intended, that is, for the use of physicians, is not accomplished, and the heterogeneous material that reaches British Relief probably would have little value. Many samples left physicians would be dangerous if used indiscriminately without the advice of a physician.

In some cases individual City and County Medical Societies have been asked to cooperate with the collection of these samples. It is our opinion that such cooperation should be refused for the obvious reasons stated.

HISTORY OF THE ARKANSAS MEDICAL SOCIETY

Compiled by the Committee

Frank Vinsonhale, Chairman, Little Rock; M. L. Norwood, Lockesburg; E. F. Ellis, Fayetteville; Robert Caldwell, Little Rock; W. T. Wootton, Hot Springs National Park; H. Moulton, Fort Smith; J. M. Lemons, Pine Bluff; E. E. Barlow, Dermott; D. A. Rhinehart, Little Rock; W. H. Mock, Prairie Grove; L. J. Kosminsky, Texarkana; F. O. Mahony, El Dorado; M. E. McCaskill, Little Rock; Geo. B. Fletcher, Hot Springs National Park; O. J. T. Johnston, Batesville; S. J. Wolfermann, Fort Smith; A. S. Buchanan and H. T. Smith, McGehee.

The forty-ninth annual session of the Arkansas Medical Society was held in Fayetteville, May 20, 21, and 22, 1924. There were the usual reports of committees, among them a report of the State Medical Board of the Arkansas Medical Society, in which the activities of the Kansas City Medical College of Medicine and Surgery and the St. Louis College of Physicians and Surgeons were condemned for their methods of teaching, rather their lack of teaching, and the graduation of incompetent men. Both of these institutions were afterwards put out of business by the State of Missouri. The society adjourned after electing Dr. Herbert Moulton, of Fort Smith, President, and Dr. William R. Bathurst, Secretary. Little Rock was selected as the next place of meeting.

The fiftieth annual session of the Arkansas Medical Society was held in Little Rock, May 13, 14, and 15, 1925. The President, H. Moulton, in his annual address to the House of Delegates, called attention to the Workmen's Compensation Law, urging that the society prepare a bill to be passed by the next legislature; discussed the cults of osteopathy and chiropractic, along with doctors of osteopathy and optometry. Dr. Moulton's address to the society concerned chiefly the history and work of medicine in Arkansas, a most interesting and fruitful address. In this address, one learned for the first time of the man who had governed the state society in its beginning.

Governor Tom Terral, of Arkansas, delivered an address of welcome which was responded to by Dr. Thomas Douglass, of Franklin County.

This being the semi-centennial of the Arkansas Medical Society, addresses were made by some

EDITORIAL NOTE: This is the fifth installment of the preliminary draft of a History of the Arkansas Medical Society. Subsequent issues will contain additional sections of the history as now prepared. The Committee will welcome suggestions or additions which the membership shall care to present.

of the members, particularly Dr. H. D. Wood, of Fayetteville, who was present at the organization of the society fifty years before. The society signified its appreciation of Dr. Wood by electing him president for the ensuing year, with Dr. Bathurst as secretary and editor of the Journal. Hot Springs was selected for the next meeting.

The fifty-first annual session of the Arkansas Medical Society was held in Hot Springs, May 18, 19, and 20, 1926. President H. D. Wood called the House of Delegates to order at 9:30 A. M. His address was turned over to Dr. J. M. Lemons who was the president-elect from the last meeting, the society having, for the first time, resorted to the practice of having a president and a president-elect. Dr. Lemons, in addressing the society, discussed the possibility of a one-board bill for medical examiners being introduced in the next legislature, stating that cooperation of the eclectics had been secured and there was a possibility of enacting such a measure. There was, however, nothing of the kind done.

The society elected Dr. Henry Thibault, of Scott, as president-elect, and Dr. William R. Bathurst as Secretary and Editor of the Journal.

The fifty-second annual session of the Arkansas Medical Society was held in Little Rock, May 11, 12, and 13, 1927. The House of Delegates was called to order by President J. M. Lemons, of Pine Bluff, at 9:30 A. M. The secretary reported the unveiling of a monument in the City Park by the Arkansas Medical Society memorializing the first dissection of the human body in this state, done by Dr. R. S. Vickery and Dr. James H. Lenow in their quarters at the arsenal in the City Park.

The address of welcome was made by the Honorable Charles H. Brough, the war governor of Arkansas. The response to the address was by Dr. S. J. Wolfermann, of Fort Smith. Memorial services by the Committee on Necrology were presided over by Dr. C. S. Pettus, chairman. Deaths of Dr. C. E. Bentley, Dr. Harry Clay Stinson, and the veteran and beloved Dr. Leonidas Kirby, along with Dr. Frank L. French, and Dr. Henry C. Dunavant, were reported.

Dr. R. H. T. Mann of Texarkana was chosen as president-elect, and Dr. William R. Bathurst was re-elected secretary and editor of the Journal. El Dorado was selected as the next place of meeting.

The fifty-third annual session of the Arkansas Medical Society was held in El Dorado, May 11, 12, and 13, 1928. Owing to the absence of the president, Dr. Henry Thibault, who was detained

at home by an illness which proved to be his last, the meeting was presided over by Dr. Homer Scott, vice-president. The House of Delegates was called to order at 9:30 A. M. by Dr. Scott who read an address to the House forwarded to him by Dr. Thibault. Dr. Thibault expressed his disappointment at not being able to fill his position as President of the Arkansas Medical Society. He called attention to the proposed Basic Science Law that had been discussed at length in the Journal, also the need of a state general hospital to be used in connection with the medical school. There was a feeling of universal regret that this distinguished member of the society, who had so faithfully attended its meetings and who had been finally honored by the highest position in the society, should be compelled to forego the pleasure of presiding over the deliberations of the meeting.

The society chose as president-elect Dr. Thad Cothorn, of Jonesboro, and Dr. William R. Bathurst, Secretary and Editor of the Journal.

The fifty-fourth annual session of the Arkansas Medical Society met in Hot Springs, May 7, 8, and 9, 1929. The House of Delegates was called to order by Dr. R. H. T. Mann, of Texarkana, at 9:30 A. M. In his address to the House, Dr. Mann called attention to the passage of the Basic Science Law by the last legislature and congratulated the society upon its enactment, thanking the society for their financial and other assistance necessary to secure its passage.

The report of the Committee on Medical Legislation was one of the features of the program. This was the first time that the society had enjoyed the guidance and assistance of the Honorable Peter Deisch, of Helena, who had been employed for the first time as attorney for the Arkansas Medical Society, and who has functioned officially in this capacity ever since. The thanks of the president were given to Dr. Norwood who gave up his practice and spent several weeks in the interest of the bill; also to Dr. Morgan Smith, in the House of Representatives, who did yeoman's services; Dr. Bathurst who acted as pilot often in dangerous places where it was necessary to use tact. Dr. H. B. Hardy, of Greenbrier, a member of the Senate, introduced a bill in the Senate where it was known as Bill 55. Dr. Hardy was chairman and succeeded in having the bill reported favorably. The opposition of the Speaker of the House to the passage of the bill endangered its passage there and made it necessary to revamp the bill so that after its passage it contained two amendments, one of which was that no member

of the faculty of the School of Medicine could serve on the Basic Science Board.

Dr. Mann presented to Dr. Vinsonhaler, who had served as chairman of the Legislative Committee, a sterling silver service with tray, something that he will always prize.

Mention should be made of the attorney-general, Honorable H. Norwood, who assisted and used his influence freely to secure the enactment of the bill; Campbell of Sevier County, James of Eureka Springs, and others who rendered assistance, but of course the chief moving spirit in insuring success was the Honorable Peter Deisch, of Helena. Dr. G. D. Royston, of St. Louis, leading obstetrician of that city, was the guest of honor and read a most interesting paper on "Modern Methods in Obstetrics."

The Committee on Necrology reported the death of Dr. George Brown, of Conway, a former president of the Society and a distinguished member of our body, and of Dr. Wallace D. Rose, who had written a work on Physical Diagnosis, and who was one of our most promising internists. Dr. Rose lost his life by drowning in the Cache River while saving the lives of members of his own family.

Dr. Thad Cothern, of Jonesboro, the incoming president, was presented to the society, along with Dr. E. E. Barlow, of Dermott, the president-elect. Fort Smith was selected as the next place of meeting.

The fifty-fifth annual session of the Arkansas Medical Society was held in Fort Smith, May 6, 7, and 8, 1930. The House of Delegates was called to order in the convention hall of the Knights of Columbus Building, by Dr. Thad Cothern, President. The usual reports of committees were made, including the report of the State Board of Medical Examiners, made by Dr. S. J. Allbright, chairman, presenting some of the results of the recently enacted Basic Science Law.

The address of welcome was delivered by Dr. J. H. Buckley, of Fort Smith, and the response was by Dr. Morgan Smith, of Little Rock. The Committee on Necrology reported the death of Dr. St. Cloud Cooper, a former president of the society.

The guest of honor of the society was Dr. Ernest Sachs, of St. Louis, who read an article on "Spinal Cord Tumors and Other Focal Spinal Lesions."

Dr. D. A. Rhinehart was made president-elect of the Arkansas Medical Society and Texarkana was selected as the next place of meeting.

The fifty-sixth annual session of the Arkansas

Medical Society met in Texarkana, April 21, 22, and 23, 1931. The House of Delegates convened in the convention hall of the Grim Hotel and was called to order at 9:30 A. M. by the president, Dr. E. E. Barlow, of Dermott. There were the customary committee reports, one being made by the chairman of the Committee on Medical Legislation, Dr. H. B. Hardy, who had been one of the principal workers in the passage of the Basic Science Law. Dr. Hardy reported the efforts made by various members of the legislature to repeal the Basic Science Law, and to lower the requirements for entrance to the School of Medicine, and the failure to provide for a composite board of medical examiners. The Honorable Peter Deisch also read a most comprehensive and interesting report. A report was made by Dr. L. V. Parmley who from this time on became the chairman of the Legislative Committee of the Arkansas Medical Society.

The society chose Dr. William H. Mock, of Prairie Grove, as president-elect and selected Little Rock as the next place of meeting.

On September 15, 1931, Dr. Henry Thibault, aged 52, widely known physician in Arkansas, passed away. Dr. Thibault had been elected president of the society and was unable to attend because of illness. He died after a lingering illness of tuberculosis. Thus passed from the Medical Society of Arkansas, and from the state, one of its most distinguished members.

The fifty-seventh annual session of the Arkansas Medical Society met in Little Rock, April 5, 6, and 7, 1932. The House of Delegates convened in the convention hall of the Marion Hotel and was called to order by the President, Dr. D. A. Rhinehart. Dr. Rhinehart's address to the House concerned recent activities of the Basic Science Board, commending the Committee on Medical Legislation, its chairman, Dr. L. V. Parmley, and making various other recommendations. There were the customary committee reports, one from the legal advisor, Honorable Peter Deisch, and one by Dr. Parmley concerning the activities of the Committee on Medical Legislation.

There developed in the House a somewhat heated discussion of the activities of the State Board of Health in conducting clinics in various counties. Dr. Garrison was called upon to explain the criticisms made by several members of the medical profession over the state.

At the close of the general session, Dr. Rhinehart handed the gavel to Dr. Mock, the next president, who introduced the new president-

elect, Dr. L. J. Kosminsky. The society adjourned to meet in Hot Springs.

The fifty-eighth annual session of the Arkansas Medical Society met in Hot Springs, May 2, 3, and 4, 1933. The House of Delegates convened in the convention hall at the Arlington Hotel, Tuesday, May 2nd, at 9:30 A. M., being called to order by the president, Dr. William H. Mock. Dr. Mock's address to the House concerned an Arkansas Health League, his purpose being to unite in one group representatives of the medical, dental, nursing, and pharmaceutical professions, hospitals, and some lay organizations which have a common interest in furthering the welfare and scientific care of the sick. The report of the Committee on Medical Legislation was made by Dr. L. V. Parmley, chairman. Dr. Parmley reported the passage and approval by the Governor of Senate bill 361, by Mitchell, known as the Doctors, Nurses, and Hospital Lien Law, as recommended by the Bureau of Legal Medical and Legislation. Dr. Parmley said that Arkansas was the first state to adopt this bill as a law. A report was also made by the legal advisor, Mr. Deisch.

On the thirty-first of October, 1933, there passed Dr. William R. Bathurst, for years secretary of the Arkansas Medical Society and Editor of the Journal. Perhaps no man in Arkansas was so well known in the profession as Dr. Bathurst. Perhaps no man in Arkansas had more friends he could call by name. He had many who were devoted to him and he left behind him a most excellent record in his activities on behalf of the Basic Science Law and other activities for medical legislation.

Dr. Bathurst's death was followed by universal expression of sorrow and regret. Resolutions of sympathy were passed by all of the organizations in medicine and also civic organizations in Arkansas. Dr. Bathurst had also served as President of the Southern Medical Association, the only member of the medical profession in Arkansas to have been so honored. The October issue of the Journal of the Arkansas Medical Society was dedicated to his memory. Thus passed from the stage one of Arkansas' most distinguished physicians.

Dr. William R. Brooksher, of Fort Smith, was selected as successor to Dr. Bathurst as editor of the Journal and Secretary of the Arkansas Medical Society. Dr. Brooksher continues at the present time to serve in that capacity.

The Arkansas Medical Society adjourned its fifty-eighth annual session by selecting Dr. F. O.

Mahony, of El Dorado, as president-elect and Little Rock as the next place of meeting.

The fifty-ninth annual session of the Arkansas Medical Society met in Little Rock, April 16, 17, and 18, 1934. The House of Delegates was called to order at 9:30 A. M. by Dr. L. J. Kosminsky. The president, in his address to the House called attention to the number of physicians in Arkansas who were eligible to membership in the society. He stated that the present membership was near the 900 mark and that by organized effort on the part of those making up the membership, others could be brought into the society. The reports of the standing committees were next received. The report of the Committee on Medical Legislation was made by Dr. L. V. Parmley, concerning several bills proposed for consideration in the next legislature. One was the Workmen's Compensation Law, the other a bill to limit the time for institution of suit for damages for malpractice. There was also the report of the Publicity Committee by Dr. Jerome S. Levy, chairman, one of the first of this type of report.

The general session was called to order April 16, 1934, at 1:30 o'clock by Dr. Kosminsky, President. The addresses of welcome were made by Dr. A. C. Shipp and Mayor Horace A. Knowlton, both of Little Rock. The response from the society was by Dr. Will H. Mock of Paragould, former president of the society.

Dr. M. E. McCaskill, of Little Rock, was chosen president-elect, and Fort Smith selected as the next place of meeting.

The sixtieth annual session of the Arkansas Medical Society was held in Fort Smith, April 15, 16, and 17, 1935. The House of Delegates was called to order by President F. O. Mahony on April 15th at 9:30 A. M. Dr. Mahony, in his address, called attention to the necessity and the opportunity for post-graduate work in Arkansas. The report of the Committee on Legislation was made by Dr. L. V. Parmley, stating that there were 117 bills introduced at the last session directly or indirectly affecting the medical profession. He also stated that Act 135 had passed the legislature. This bill placed definite limitations upon malpractice suits. Heretofore, malpractice suits could be brought against a physician many years after the alleged act took place. It passed both houses without a dissenting vote. Act 165 gave the Arkansas State Board of Medical Examiners the privilege to recognize a certificate issued by the National Board of Examiners. The guest of honor

at this meeting was Dr. Walter L. Bierring, of Des Moines, Iowa. Dr. George B. Fletcher, of Hot Springs, was made president-elect and Dr. W. R. Brooksher was to continue as secretary.

The general session was called to order by President F. O. Mahony at 1:30 p. m., Monday, April 15, 1935. The address of welcome was delivered by Dr. F. H. Krock, of Fort Smith, and the response was given by Dr. W. T. Wootton, of Hot Springs.

On September 14, 1935, Dr. Morgan Smith died suddenly at his residence in Little Rock. Dr. Smith had been Secretary and President of the Arkansas Medical Society, and director of the Rockefeller Foundation for the Extermination of Hookworm in Arkansas. He had served for a number of years as dean of the School of Medicine of the University of Arkansas, as Professor of Physiology and later of Pediatrics in that institution. He also served several terms as a member of the lower house of the Legislature. In all these positions, Dr. Smith displayed a high degree of ability. On more than one occasion he demonstrated his fitness for the position he occupied by saving the school during critical periods of its existence. He rendered valuable assistance in the passage of the Basic Science Law in his capacity of member of the Legislature. He was a member of the Rotary Club, of the Knights of Pythias, of which he had been state president, and was a member of the Scottish Rite and Coordinate bodies in Masonry. The writer desires to pay him a tribute of respect and affection. He was for many years a conspicuous figure in our Society.

The Sixty-first Annual Session of the Arkansas Medical Society met in Hot Springs, April 27, 28, and 29, 1936. The meeting was called to order by Dr. M. E. McCaskill, President. In his address to the House of Delegates, Dr. McCaskill called attention to the work of the various national agencies having to do with indigent sick, and expressed regret at not being able to meet with the medical groups over the state as frequently as he would like.

The report of the Committee on Medical Legislation was made by Dr. Val Parmley. He expressed appreciation that during the year there had been perfect harmony between the State Medical Society, the Medical School, and the State Board of Health.

The Society chose as President-elect, Dr. O. J. T. Johnston, of Batesville, and Dr. W. R. Brooksher as Secretary. Little Rock was selected for the next meeting.

The Sixty-second Annual Session of the Arkansas Medical Society met at the Marion Hotel in Little Rock, April 12, 13, and 14, 1937. The meeting was called to order by Dr. George B. Fletcher, President. There were the usual committee reports, among them that of the Committee on Medical Legislation by Dr. Parmley, Chairman, in which he stated at the conclusion that he desired to express his appreciation for the opportunity of serving as chairman of this committee, but he would be forced to decline to accept the position in the future.

Dr. S. J. Wolfermann, of Fort Smith, was chosen as President-elect, and Texarkana selected as the next place of meeting.

At this session of the Arkansas Medical Society was presented by Dr. Charles Heyd, of New York, President of the A. M. A., the subject being, "Peritonitis, Its Recognition and Treatment." There was also present Dr. Kirklin, of the Mayo Foundation, as a guest of the Society.

The 1937 roster of the Arkansas Medical Society contained 1,063 names on November 1, 1937.

The Sixty-third Annual Session of the Arkansas Medical Society met at the Grim Hotel in Texarkana, April 18, 19, and 20, 1938. The House of Delegates was called to order at 9 o'clock on April 18th by President Johnston. There were the usual reports of committees. The President, in his annual address to the House of Delegates, called attention to the threat of socialized medicine in the United States and mentioned its failure in England and Germany.

The guests of honor were President J. H. Upham, of the American Medical Association, who read an address on "Present-Day Problems of the Medical Profession," and Dr. W. R. Buffington, of New Orleans, Professor of Ophthalmology at Tulane University and a former resident of Arkansas.

On this occasion the Society chose Dr. A. S. Buchanan as President-elect for the ensuing year, and selected Hot Springs as the next place of meeting.

The Sixty-fourth Annual Session of the Arkansas Medical Society was held in Hot Springs at the Arlington Hotel, May 8, 9, and 10, 1939, with President S. J. Wolfermann in the chair. Dr. Wolfermann, in his address to the House of Delegates, called attention to the method in the House of selecting the President of the Society, and stated that he regarded the selection of

three candidates as undesirable, recommending that a change be made. He also urged the members of the society to get behind the medical school and to assist it in every way possible.

The guests of honor were Dr. Morris Fishbein, of Chicago, and Dr. A. Hertzler, of Kansas. A public meeting was held at the Arlington Hotel on May 8, 1939, at 7:45 o'clock. Addresses were made by Dr. Hertzler on "A New Trend in Medicine" and by Dr. Fishbein on "Fads and Quackery in Healing."

Dr. H. T. Smith, of McGehee, was chosen for President-elect, and Fort Smith was selected for the next place of meeting.

On December 9, 1939, Dr. L. Vallette Parmley passed away. Dr. Parmley was one of the most active and colorful figures in medical legislation during recent years. He possessed an unusual personality; fearless, alert, and efficient. He was always dependable and succeeded in nearly every undertaking with the Legislature. He was a member of the American Expeditionary Forces in the first World War. The writer remembers him in a rest camp where he was in charge of a detachment of casualties. He had been detached from the medical corps and made a line officer because of his peculiar ability in handling casualties. He was active in both France and England in this capacity, and narrowly escaped a permanent transfer from the medical corps to the line. Dr. Parmley's death at the very zenith of his usefulness will always be a matter of regret and grief among his many friends. He served as chairman of the Legislative Committee from 1931 until 1938. There is no doubt that had he lived he would have been further honored by the profession.

The writer ends at this point the History of Medicine in Arkansas. It has been extended over a period of one hundred twenty years. He desires to acknowledge gratefully the assistance of secretaries Miss Florence Lawson and Mrs. James P. Jernigan, who have so faithfully and kindly lent their assistance to the completion of this work. He also wishes to acknowledge the assistance of Dr. J. Thomas Archer who assisted in the examination of the files of the Arkansas Gazette in order to obtain material from 1820-1860 for this work.

This work has been laborious and has involved considerable research. Notwithstanding that, it must be considered as incomplete, containing

doubtless errors which will be corrected in the future. It has been a labor of love, nevertheless, and the writer can use the language put into the mouth of Touchstone by Shakespeare in speaking of Audrey as an "ill favored thing but mine own."

There may be instances in the work where the affection of the writer for certain of his friends who figure in this history has led him too far. There are doubtless places where more research should have been done, but with all these shortcomings the writer asks your indulgence. He would have done better if he could.

IN MEMORIAM

DR. LEE EDWIN BILES

Whereas, in the untimely death of Dr. Lee Edwin Biles, the Woodruff County Medical Society, and the Arkansas Medical Society have lost one of their most valued members and the community one of its most worthy citizens, and

Whereas, this kind, generous and loyal character leaves behind many patients and friends to whom he gave unsparingly of his time, skill and energy, even sacrificing his own life to alleviate the suffering of others, carrying out a faithful adherence to that Principle of Medical Ethics, that a physician must continue his labors for the alleviation of suffering people without regard to his own health or life or to financial return.

Whereas, Dr. Biles leaves behind him as a monument his record of many years of faithful and efficient service as Secretary of the Woodruff County Medical Society.

Therefore, be it resolved, that the Woodruff County Medical Society feels deeply his loss and mourns his passing.

Be it further resolved, that a copy of this resolution be incorporated in the minutes of the Woodruff County Medical Society, that a copy of same be sent to the Secretary of the Arkansas Medical Society, and a copy of the family of Dr. Biles.

Signed: J. W. MORRIS,
R. N. SMITH,
J. F. HAYS,
E. F. BREWER,
F. C. MAGUIRE,
W. T. WILKINS,
C. E. DUNGAN, Secretary.

TUBERCULOSIS ABSTRACTS

A Review for Physicians

ISSUED MONTHLY BY THE NATIONAL TUBERCULOSIS ASSOCIATION

THE parable of the sower served Osler well in his effort to explain the protean nature of tuberculosis. The interplay between seed and soil, both highly variable, accounts for the infinite variety of pathological patterns seen in this disease. Of late, so much emphasis has been placed on the role of the seed (tubercle bacillus infection) that interest in the soil has probably been slighted. For that reason two timely papers concerned with the influence of nutrition on the development of tuberculosis merit attention. Space permits little more than a summary of the conclusions of these articles.

CONSTITUTION AND DIET IN TUBERCULOSIS

Resistance to disease may depend upon many things, but probably the most important, all other things being equal, is the inherited constitution. This belief is based on epidemiological studies, family records, studies of identical and fraternal twins, and animal experimentation. Excellent examples of each are cited and interpreted by the author.

The constitution can, however, be modified by outside influences not the least of which is the food we eat. That diet does influence the cause of tuberculosis has been well demonstrated by students of the problem during economic depressions and war.

For example, Denmark's experience during the World War is significant. In the belligerent countries the tuberculosis death rate rose steadily and reached its peak in 1918. In Denmark also the rate rose but the peak was reached in 1917 and fell precipitately. From the beginning of the war Denmark exported great quantities of butter, cattle and bacon; margarine replaced butter in the diet. There was loss of vitamins A and D. The consumption of meat and fish fell

off. In 1917 the blockade interfered with exportation. The consumption of butter in Denmark promptly quadrupled, and that of meat increased almost five-fold. Total calories consumed did not vary much. All other factors that might influence the tuberculosis rate were accounted for. The consumption of meat and fish seemed to parallel the mortality curve inversely—the consumption of vegetables did not.

Isolation of the patient with open tuberculosis has reduced the chances of infection in others and has lessened perhaps the infecting dose and the possibility of repeated infections. Moreover, as the generations have come and gone, natural laws have acted to weed out the susceptibles. Better dietary habits, especially during the past twenty years, have enhanced inborn resistance to all diseases including tuberculosis. These two factors, the inherited constitution and the better understanding of nutrition, have played their part in the reduction of the tuberculosis mortality rate.

Constitution and Diet in Tuberculosis, by Fred H. Heise, M.D., *Amer. Rev. of Tuberc.*, Feb., 1941.

VITAMIN C AND TUBERCULOSIS

As healing in tuberculosis is characterized largely by the formation of connective tissue, and the latter is formed by the action of vitamin C on fibroblasts, it does not seem unreasonable to suspect that a vitamin C deficiency may be one of the causes of unfavorable trends in tuberculosis, if it does not actually contribute to exacerbations of the disease. Replenishment of

such deficiency may help to change the disease from an unfavorable to a more favorable one. This reasoning led to a study of vitamin C in health and disease in addition to extensive therapeutic experiments made in a large series of cases of pulmonary tuberculosis.

The authors summarize previous studies of vitamin C—the normal daily requirements, the

requirements in tuberculous individuals, results of analysis of organs for vitamin C, and other phases of the subject.

In the first phase of the experiments 98 carefully selected tuberculous persons were divided into three groups, as impartially as possible, and members of the groups were matched as closely as possible. One group received daily, in addition to the general hospital diet, 500 cc. of a synthetic orange-flavored preparation, to which was added an amount of crystalline vitamin C equivalent to the vitamin C in the same volume of fresh orange juice. A second group received daily, in addition to the general hospital diet, 500 cc. of freshly prepared orange juice. The third group received, in addition to the general hospital diet, 500 cc. of the orange-flavored preparation without vitamin C (the control group). Of the 98 patients, 60 remained to the end of the six-months experiment period.

In analyzing the charts at the end of the experiment there is so much similarity of the three groups that they are practically interchangeable. While there was a greater number of cases in the orange and vitamin groups showing a favorable hematinic effect, the average loss or gain was not sufficient to record by any laboratory means over the whole course of treatment.

An empirical method of calculation revealed also that there was little change roentgenologically between the composite figures of the three groups.

As to the clinical results, the weight gain or loss is the only factor that gives any precise information that can be tabulated. The patients remaining to the end who were not molested in some way by treatment or other interferences were compared in the table.

Of 23 patients remaining on orange, 10 (43.4 per cent) gained weight, 2 (8.7 per cent) were stationary, and 11 (47.9 per cent) lost. In the vitamin group only 7 (30.4 per cent) gained; 9 (39.2 per cent) were stationary, and 7 (30.4 per cent) lost. Of the controls 4 (28.5 per cent) gained; 4 (28.5 per cent) were stationary, and 6 (42.0 per cent) lost, respectively. The net result from this particular analysis reveals a similarity of all three groups.

A significant fact, however, was that the control groups were more difficult to maintain than the treated groups. That is, certain unsaturated patients of the controls died more quickly, or were otherwise forced to discontinue the treatment, than in the groups saturated from the

beginning with vitamin C. Of the cases "carried" for more than three months, but not for six months, there were two deaths in the vitamin group, three in the orange group (average 2.5) and seven in the control group.

Two more mass experiments were carried out in slightly earlier cases. There was no essential difference in the final result.

The authors' conclusions include the following:

The observations justify the tentative recommendation that no patient shall have less than the optimum standard dosage of 0.84 mg. per kilogram of body weight a day (50 to 60 mg. total) and that the quantity of the vitamin should be increased to 200 mg. a day progressively with the severity, activity and duration of the disease.

It was found that in saturation there was roughly 5 mg. of vitamin C per hundred grams of total body tissue, which would represent a total quantity of 3 to 5 gm. in the normal body. Without supplementary administration of vitamin C this quantity is dissipated in advanced tuberculosis before death, sometimes to a negligible quantity.

Frequently when the disease is far advanced, patients deficient in vitamin C are benefited by being kept saturated with the vitamin, as shown by a prolongation of life of the treated patients over the controls, as well as slightly more favorable clinical and laboratory observations. Adequate vitamin C is therefore just one of the many factors necessary for a proper treatment of tuberculosis.

No benefit was noted in an excess beyond saturation.

The Body Economy of Vitamin C in Health and Disease, by Henry C. Sweany, M. D.; Charlotte Louise Clancy, M. D.; Molly H. Radford, M. D.; and Viola Hunter, M. Sc., *Jour. of Amer. Med. Assn.*, February 8, 1941.

COMMUNIQUE

April 7th, 1941.

To the Editor:

We, who are in the service, appreciate very much the courtesy extended us. We are celebrating Army Day today although a shower has decreased the expected crowd. We Arkansans are proud of the privilege of serving with an all-Arkansas regiment.

C. L. HYATT, 1st Lt., M. C.,
153rd Infantry,
Camp Robinson, Arkansas.

THE JOURNAL

OF THE

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W. R. BROOKSHER, M. D., Editor
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EDITORIALS

THE ANNUAL SESSION

Nearly 600 registered for the Sixty-sixth Annual Session of the Society in Little Rock, April 14th, 15th and 16th. The scientific program was of unusual interest and it was gratifying to note the high quality of the presentations from the membership. Invited guests were fewer in number than in former years, giving the Arkansas profession ample opportunity to present their work. It is felt that this added to the attraction of the scientific sessions. Dr. Nathan B. Van Etten, President, American Medical Association, was well received by the profession and the public at the first day's session. Other invited guests were: Kenneth Phillips, Miami; Ralph O. Ryche-nor, Memphis; Frank Acree, Greenville, Mississippi; Daniel L. Sexton, Saint Louis; and Orval R. Withers, Kansas City. The scientific exhibit space was filled giving prominent attention to the exhibits of members. The entertainment features were most enjoyable and it is to the credit of the Pulaski County Medical Society that they took full advantage of every opportunity to play the part of gracious hosts. The

following officers were elected: President-Elect, R. B. Robins; First Vice-President, H. King Wade, Hot Springs National Park; Second Vice-President, C. C. Hanchey, DeQueen; Third Vice-President, B. M. Stevenson, West Memphis; Treasurer, R. J. Calcote, Little Rock; Secretary, W. R. Brooksher, Fort Smith; Councilor, 1st District, F. H. Jones, Piggott; 3rd District, J. O. Rush, Forrest City; 5th District, B. L. Moore, El Dorado; 7th District, Euclid M. Smith, Hot Springs National Park; 9th District, J. F. John, Eureka Springs; Delegate to the American Medical Association, W. R. Brooksher, Fort Smith, and Alternate, H. T. Smith, McGehee. H. Fay H. Jones, Little Rock, assumed the office of President for 1941-42. At the Council organization meeting, Euclid M. Smith was elected Chairman and F. A. Corn, Jr., Secretary. The Section on Ophthalmology and Otolaryngology elected the following officers: Chairman, Raymond C. Cook, Little Rock; Vice-Chairman, W. J. Schwarz, Lake Village; and Secretary, K. W. Cosgrove, Little Rock. The 1942 meeting will be held in Texarkana.

ANNUAL REGISTRATION

HON. PETER A. DEISCH

In accordance with a resolution adopted by the House of Delegates at its meeting in 1940, the Society presented to the recent Legislature, a bill providing for annual registration of all medical practitioners, save eclectics. The eclectics, the nurses, lawyers and engineers all have annual registration, and this new act merely makes the law uniform as to all professional men.

The fee will be \$2.00 for residents and \$4.00 for nonresidents, annually, and this year it must be paid prior to July 1st, to the Secretary of the State Medical Board of the Arkansas Medical Society, Dr. D. L. Owens, Harrison. Thereafter the fee will be due on or before January 1st of each year.

No complete list of doctors has heretofore been available, although the eclectics have issued a pamphlet containing a complete list of their members, and other valuable information, and they are loud in their praises of its advantages. As the secretary of the board changes every four years, and the records are shipped from one secretary to another, it has been found that uniformity was lacking, that some secretaries have been good clerical men, while some have not, with the result that the records have been more or less haphazardly kept, until in recent years. The address given at the time of

the original issuance of the license is all that the secretary has, but under this act he will have the name and address of every doctor, together with the date of his license. Order can now be obtained, and a complete directory can be placed in the hands of every practitioner.

In due time the secretary will mail cards to all those who are engaged in the practice so far as known to him. Failure to receive a card from the secretary will be no excuse for not registering, and a failure to register forfeits the right to practice, as is the result in all other professions.

Funds will be available for investigation of violations of the medical practice act, while nothing could heretofore be done to stamp out illegal practice, violations of the narcotic law, or other unauthorized practices. If such a fund had been in existence, there would have been no violations of the Basic Science Act, with the resultant illegal licensing of many chiropractors nor would never have been so strong in numbers and prosperity as to create the furor which they did at the recent session of the Legislature. The new chiropractic law prohibits them from advertising untruthful and improbable statements, or from soliciting, if it was not for the fund created by the annual registration law, it would be impossible to watch them and to compel a compliance by them and other cultists and irregulars with the law. All violations of the law, whether by regular practitioners, cultists or irregulars will now be promptly investigated, and the offenders dealt with. No longer will we be subject to the criticism that Arkansas is the dumping ground of quacks, for now we can and will prosecute all offenders against the laws pertaining to the healing arts.

EDITORIAL COMMENT

HONOR ROLL

The following county medical societies made remittance to cover one hundred per cent of their 1940 membership prior to the constitutional date of March 1st, 1941:

BRADLEY	LITTLE RIVER
CLAY	MONROE
COLUMBIA	NEVADA
DREW	OUACHITA
GRANT	PHILLIPS
HEMPSTEAD	SEARCY
JACKSON	SEVIER
JOHNSON	WASHINGTON
LAWRENCE	WHITE
LINCOLN	

PROCEEDINGS OF SOCIETIES

Madison County Medical Society has elected the following officers: President, N. J. Hill, Hindsville; Fred Youngblood, Secretary-Treasurer; G. D. Counts, Wesley, Delegate; and Fred Youngblood, Alternate.

The Second Councilor District Medical Society met at Batesville in dinner session, April 8th, for the following program: "Heart Diseases," S. C. Fulmer, Little Rock; "Thyroid Diseases," Paul F. Stookey, Kansas City; and "Diarrheas of Children," Sam Phillips, Little Rock.

Saline County Medical Society has elected the following officers: President, Dewell Gann, Sr.; Vice-President, M. M. Blakely; Secretary-Treasurer, C. W. Jones; Delegate, J. E. Little; and Alternate, Dewell Gann, Sr.

The Sebastian County Medical Society was addressed on April 8th by Earl Conway Smith, "Leukorrhea," and J. C. Herring, "Anaglesia in Obstetrics," both speakers of New Orleans.

Hot Spring County Medical Society has elected the following officers: President, M. D. Prickett, Malvern; Vice-President, R. V. McCray, Malvern; Secretary-Treasurer, B. T. Kolb, Donaldson; Delegate, W. G. Hodges, Malvern; and Alternate, Agnes Carpenter Kolb, Donaldson.

Woodruff County Medical Society has elected the following officers: President, J. W. Morris, McCrory; Vice-President, F. C. Maguire, Augusta; Secretary-Treasurer, C. E. Dungan, Augusta; Delegate, C. E. Dungan; and Alternate, J. F. Hays.

The Washington County Medical Society was addressed on April 1st by Fred H. Krock, Fort Smith, on "Fractures."

The Southeast Arkansas Medical Society met in dinner session at Monticello, March 24th with 36 physicians present. The Society was addressed by Mrs. Alfred Hathcock, President,

Woman's Auxiliary; H. T. Smith, McGehee, "Medical Ethics"; S. W. Douglas, Eudora, "Medical Organization"; and Hon. A. J. Johnson, "The Law and the Physician." The following officers were elected: President, W. T. Lowe, Pine Bluff; Vice-President, Rufus Martin, Warren; and Secretary, A. R. Russell, Pine Bluff.

S. W. Douglas, Councilor.

Pope-Yell County Medical Society has elected the following officers: President, J. K. Grace, Belleville; Vice-President, A. W. Rye, Russellville; Secretary-Treasurer, Brooks Teeter, Russellville; Delegates, L. Gardner, Russellville, and W. E. Ballenger, Plainview; and Alternates, Robert Hood, Russellville, and H. L. Montgomery, Gravelly.

The Muskogee County (Oklahoma) Medical Society was addressed on March 17th by A. F. Hoge, "Cancer of the Breast"; Ralph E. Crigler, "Some Common Rectal Disorders"; and S. J. Wolfermann, "The Treatment of Compound Fractures," all speakers of Fort Smith.

The Arkansas State Pediatric Society in annual session at Little Rock, April 14th, elected the following officers: President, Sam Phillips, Little Rock; Vice-President, Charles Wallis, Little Rock, and Secretary, Ralph E. Weddington, Batesville.

OBITUARY

WILLIAM J. ROBINSON, age 77, died at his home in Portia, March 11th. Born at Sylamore, he had lived in that section all his life. He graduated from the Memphis Hospital Medical College in 1897. Surviving relatives are his wife and three brothers, one of whom, Dr. T. J. Robinson, resides at Wilmar.

COMING MEDICAL MEETINGS

First Councilor District Medical Society, Cash, May 16th.
American Medical Association, Cleveland, June 2nd-6th.

BOOKS RECEIVED

Merchants in Medicine: by Emanuel M. Josephson, M. D. Pp. 223. Price \$1.50. New York: Chadney Press, 1941.

PERSONALS AND NEWS ITEMS

"Pontocaine in Spinal Anesthesia," by Jos. B. Wharton, Jr., and "Interesting Cases of Tularemia," by Geo. W. Parson, Texarkana, appear in the March issue of The Tri-State Medical Journal.

B. E. Barlow has been elected a director of the Dermott Rotary Club.

C. H. Smythe has moved from Texarkana to DeQueen.

William Hibbitts has been elected a director of the Texarkana Lions Club.

The Arkansas Tuberculosis Association has elected A. C. Shipp, Little Rock, President; J. S. Levy, Little Rock, Secretary; W. R. Brooksher and S. J. Wolfermann, Fort Smith, and B. E. Barlow, Dermott, Board Members; and Geo. M. Love, Director for Benton County.

J. S. Levy and Sam Phillips have been elected President and Director, respectively, of the Temple Men's Club at Little Rock.

O. A. Jamison has been elected treasurer at Tuckerman.

Fred H. Krock, Fort Smith, has been elected Vice-Chairman of the Sebastian County Chapter, American Red Cross.

Dr. and Mrs. C. G. Hinkle, Batesville, spent a recent vacation at Southern points.

C. H. Reagan, Marked Tree, has reported to active duty with the Medical Corps, United States Army.

The Jonesboro School Board has elected H. H. McAdams, President, and W. C. Overstreet, Vice-President.

Paul Gray recently discussed "Diseases of the Heart" before the Batesville Rotary Club.

W. T. Thorn has moved from Monette to Marked Tree.

Euclid M. Smith, Hot Springs National Park, has been appointed a trustee of the University of Arkansas.

W. B. Grayson, T. T. Ross, and H. V. Stewart, Little Rock, recently visited the Indiana State Health Building, Indianapolis.

W. P. Scarlett recently addressed the Morrilton Kiwanis Club.

BORN—A daughter, Eleanor, to Dr. and Mrs. Raymond C. Cook, Little Rock, March 20th.

W. G. Eberle has been reappointed to a five-year term on the Fort Smith Housing Authority.

J. C. Davis, Little Rock, spent a recent vacation on the Mississippi Gulf Coast and attended clinics in New Orleans.

C. C. Reed, Jr., Little Rock, has been awarded the Legion of Honor by the Grand Council, Order of DeMolay.

Among those in attendance at the Dallas Southern Clinical Society were R. B. Robins, Camden; I. G. Jones, DeQueen; D. W. Goldstein, Fort Smith; and W. S. Ellis, Fordyce.

M. W. Chastain has been elected a director of the Bentonville Rotary Club.

H. Lee Fuller, Little Rock, addressed the Osceola P.-T. A., April 10th, on "Tuberculosis."

W. L. Boswell, Clarendon, has been elected a director of the Brinkley Golf Club.

Edward Adams has been elected alderman at DeVall's Bluff.

Alan Cazort has been elected a director of the Little Rock Rotary Club.

Guy Shrigley, Jr., has been elected lion tamer of the Clarksville Lions Club.

W. B. Grayson has been re-elected State Health Officer.

L. L. Fatherree and John R. May have been elected city health officer and city visiting physician at Little Rock.

R. M. Eubanks, Little Rock, was honored at the College of Ozarks Homecoming, April 16th.

John H. Calley, Little Rock, has been ordered to active duty as Captain, Medical Corps, United States Army, and assigned to Station Hospital, Camp Robinson.

H. H. Holt, Nashville, who spent a March vacation in Florida, reports the catch of a 125-pound tiger shark.

Earle D. McKelvey has been elected a director of the Paragould Rotary Club.

Thos. Douglass has been elected vice-president of the Ozark Rotary Club.

BORN—On April 21st, a son, to Dr. and Mrs. Carl L. Wilson, Fort Smith.

The April annual meeting of the Arkansas Tuberculosis Association was addressed by A. C. Shipp, Little Rock; J. D. Riley, State Sanatorium; H. T. Smith, McGehee; and H. Lee Fuller, Little Rock.

RANDOM THOUGHTS OF THE SECRETARY

March 17th. On St. Patrick's Day, Sidney O'Wolfermann being the only Irishman in the crowd, we act as tour manager for Hoge, Eberle, Crigler and the Irish to a meeting with the Muskogee boys. Our attention to the many anecdotes of the evening is diverted on occasion by reminiscences of our many travels to the Indian capitol, ever a trip of more than passing interest. Pleased to see Neely continuing to bubble enthusiasm for his county medical society, but disturbed at what we fear are signs of an ebb in the full and hearty support that has been his for many a day.

March 20th. Arizona-bound, we board the Memphis-Californian at Mansfield this morning and relax throughout the day as we cross the plains of western Oklahoma. With Texas just ahead, the youngster seems to lose his exuberance and then complains of "tears in his eyes." To bed, the only solace his mother has being aspirin, the suspicion of measles and the doubtful comfort of a radiologist on his own as a pediatrician.

March 21st. Marking time on the suspected measles in a hotel room at El Paso, we visit the 206th, gloriously encamped at Fort Bliss with conveniences unheard of in any former encampment period. For professional advice, Stanley Gates returns to the city, and confirms our fears that a mere childhood disease has wrecked this vacation. However, improvement coming, we postpone departure, realizing full well just at train time, that this was poor judgment.

March 22nd. A long, difficult day is ours in El Paso, getting about two hours of vacation as we go across the border for a look.

March 23rd. Last night, today and tonight, retracking our trip, reaching the homestead at midnight, all tired but glad that we are back for the siege.

March 24th. In full glory comes the maculo-popular eruption and the tentative diagnosis becomes final.

March 31st. Representing the Women's Field Army we talk to the Rotarians today, the abundant heckling passing us by for the once, possibly a tribute to our sponsorship by Goldstein.

April 13th. Away to the convention city, summer weather making the day a bit on the torrid side. The routine matters of preliminary arrangements attended to with dispatch, we visit about the lobby and town with the early arrivals, again failing in our repeated resolve to retire much earlier than we ever do.

April 14th. In considerable number the members arrive at the registration desk. Our alarm at the formidable array of committee reports was excess trouble, the business of the morning session is speedily disposed, affording some opportunity to visit about with the exhibitors before lunch. These boys deserve much praise; without the cooperation of the commercial houses, no convention would be a success, and here the representatives appear determined to go a bit further in making it a happy occasion. At the council luncheon, Herold, of Louisiana, tells of the minister and truck driver and the minister's soft rebuttal in polite language, a story which makes the

rounds of the meeting. Van Etten makes a fighting talk, surely one to stir up activity within the breasts of indifferent physicians.

April 15th. The scientific session has the most compact and continuous attendance we have seen in several years, all intent on the presentations of good speakers. During the day there was heard some talk of political activity and even suggested that the House of Delegates meet, henceforth, on Tuesday afternoon, no doubt a boon to some who take their politics in a most serious vein. The defense program must be bringing business to the offices of Little Rock physicians, yet we wonder just how many are seeing, professionally, their out-of-town colleagues this day. The Pulaski county boys do themselves proud at the buffet dinner this night, satisfying and abundant food, good music, pleasant conversation, all contributing to a wonderful evening. Unfortunately, all did not have the fun of seeing Huey, Clyde McNeil's personal waiter and bodyguard, in action.

April 16th. Down the home stretch, the going complicated by the gathering of the P.-T. A. and a prolonged session of the Lions Club, which we understand, was addressed by Bob Robins. Yet, all smoothed out eventually, and the session closed with evident regret on the part of all, there being no promptness to the motion for final adjournment. Taking departure of Hairston, whose job as Marion manager has been a most difficult one, the rest of the staff, and loading the car, we pause for the post-mortem at President Jones', where Elizabeth and Edna Marie gave us cheer and pleasure as only children do. Arriving at the homestead at 11:10, we can call the session history, giving no thought to the details which yet await our attention. Peggy wonders, as do we, who owns that green bracelet left in our room.

QUITE TRUE; LET THEM DEFINE THE OBJECTIVES AND STANDARDS SOUGHT

"If the government," says an editorial in the Dayton Herald, "is trying to reduce the medical profession to the status of a trade in the hope of providing better care for the lower income group, then its lawyers and its witnesses should at least have some idea of the standard they are trying to achieve."

In our opinion, the editor has something there. His implication that some of the recent efforts at reform have been stabs in the dark calls attention to the importance of a well-defined objectives in any program. In defending the traditional principles of practice the medical profession does so out of the conviction that only thus can the best medical care be provided to the public. When and if somebody satisfactorily disproves that basic assumption, the profession will admit its error. After all, the physician's primary interest is the consequent of disease. Terminology and mechanisms are only incidental.

The present breathing space should not be considered as terminating the danger of state medicine or even postponing it indefinitely. . . . If the profession demonstrates its ability to supply medical needs efficiently and inexpensively, the government will have no excuse for asking the nation to support the vast political bureaucracy which is the inescapable concomitant of state medicine.

—The New York Medical Week.

WOMAN'S AUXILIARY PAGE

MRS. H. E. MURRY, Publicity Secretary

Mrs. V. E. Holcombe of Charleston, W. Va., President of the Woman's Auxiliary to the American Medical Association, spoke on March 3rd, and was guest of honor at a luncheon at the home of Mrs. Alfred H. Hathcock, President of the State Auxiliary.

Mrs. Holcombe discussed Auxiliary activities, with especial emphasis on the Bulletin, the only official news organ of the Woman's Auxiliary to the A. M. A. "Only through information can you have inspiration," she told the women.

Also a guest was Mrs. Calvin Churchill of Batesville, who in April will succeed Mrs. Hathcock as State President.

Thirty-five were present at the meeting at luncheon. Members of the Sebastian County Auxiliary and ladies from Huntsville, Springdale and Prairie Grove attended besides local members of the Washington County Auxiliary.

Immediately following luncheon Mrs. Holcombe, who is making her official visits to Auxiliaries of each state, left to make stops in Texarkana and Dallas.

Mrs. H. H. Howze, who is leaving soon to make her home in Jenkins, Ky., was complimented at a handkerchief shower by members of the Woman's Auxiliary to the Medical Society of Washington County. Mrs. R. H. Huntington was hostess to 12 members for dinner at her home. A three-course dinner was served.

At a business meeting following dinner, Mrs. Jack Butt, Mrs. Fount Richardson and Mrs. F. R. Morrow were named on a nominating committee to nominate officers. Election will be held at the April meeting. Plans for the state exhibit also were discussed, and the cancer control film "Choose to Live," which is to be shown at the open meeting of the City Council P.-T. A. on March 25th, was announced.

On March 13th, Mrs. James Lewis, retiring President of the Auxiliary to the Washington County Medical Society, was hostess to members at a formal dinner and bridge at the Fayetteville Country Club at 6:30 p. m. A business meeting followed the meal and 1941-42 officers were elected as follows: President, Mrs. E. F. Ellis, Fayetteville; Vice-President, Mrs. R. T. Henry, Springdale; Secretary, Mrs. P. L. Hathcock, Jr.; Treasurer, Mrs. R. H. Huntington.

On March 20, the annual City Hospital shower and tea was given by the Washington County Woman's Medical Auxiliary. About 100 guests were present, and 600 gifts for the hospital were received. Mrs. Fount Richardson was general chairman of the tea, Mrs. Alfred Hathcock and Mrs. James Lewis received and displayed gifts in the Civic Club Auditorium. In the dining room were Mesdames Loyce Hathcock, R. H. Huntington, C. S. Paddock and R. T. Henry. Mrs. P. L. Hathcock and Mrs. E. F. Ellis presided at the table. The guest book was in charge of Mrs. Richard Miller. Other members were in charge of the lounge.

On March 24, Mrs. James Lewis read a paper before the Business and Professional Woman's Club of Fayetteville at the showing of the picture "Choose to Live," sponsored by the Woman's Medical Auxiliary.

On March 25, the Woman's Auxiliary is sponsoring the same picture with the P.-T. A. at the High School Auditorium, to which the public is invited.

MRS. JAMES LEWIS,
President, Washington County
Medical Auxiliary.

Mrs. A. G. Lee, Mrs. J. F. Williams and Mrs. A. W. Roberts entertained members of the Bowie and Miller Medical Auxiliary, Friday afternoon at the home of Mrs. S. W. Alston, 1804 Beech street. Spring flowers were used beautifully about the house.

Mrs. Joe Tyson directed the business session and Mrs. Ralph Cross announced that the Bowie and Miller Auxiliary had won second prize in the national Hygeia contest. Plans were made for a dinner on April 25 honoring Mrs. William Hibbitts, President of the Auxiliary of the Texas Medical Association and Dr. Preston Hunt, President of the Texas Medical Association. Mrs. J. T. Robison was named general chairman of arrangements.

A report of the Nominating Committee was accepted and the following officers were named for the ensuing year: Mrs. L. H. Lanier, President; Mrs. R. R. Kirkpatrick, President-elect; Mrs. Allen Collom, Jr., First Vice-President; Mrs. R. H. T. Mann, Second Vice-President; Mrs. T. F. Kittrell, Third Vice-President; Mrs. P. H. Phillips (Ashdown), Fourth Vice-President; Mrs. N. B. Daniel, Recording Secretary; Mrs. E. M. Watts, Corresponding Secretary; Mrs. A. G. Lee, Treasurer; Mrs. S. A. Collom, Historian; Mrs. Roy Baskett, Publicity Secretary; and Mrs. Harry Murry, Parliamentarian.

Mrs. N. B. Daniel was named delegate to the Arkansas State Auxiliary meeting, April 14, 15, and 16, and Mrs. Ralph Cross was selected as alternate.

Mrs. J. W. Deaton and Mrs. Rolph were introduced. Mrs. Rolph has recently moved to Texarkana. Dr. Rolph is connected with the Bowie County Health Department.

Winners of a public school essay contest on health were presented by Mrs. L. H. Lanier. Elizabeth Cigainero of Providence Academy, Bob Mundella of Sacred Heart Academy, Patsy Thomasson of Arkansas Junior High, and Bennie Francis Minflew of Texas Junior High were presented with prizes. Their subject was "Health as a First Line of National Defense."

Mrs. Tyson presented Mrs. J. T. Robison, whose subject was "Ethics for Doctors' Wives," presenting the original code of ethics laid down by the Great Physician as the ideal code. She used the interpretation of Ernest M. Ligon in his "Psychology of a Christian Personality."

During the social hour, the hostesses served lovely ices moulded in the form of Easter lilies, with cakes and

mints. The dining table, laid with a beautiful cut work cloth, held a centerpiece of Easter lilies and white candles in crystal candelabra. Easter lilies and typophila decorated the buffet.

Copies of questionnaire from the American Legion were distributed and a poem by Nina Hannon dedicated to the doctors was passed.

AUXILIARY LUNCHEON

The Woman's Auxiliary to the Pulaski County Medical Society met for 1 o'clock luncheon Wednesday at the home of Mrs. M. E. McCaskill. Mrs. J. Leo Aday, Mrs. W. R. Richardson, and Mrs. Homer A. Higgins were co-hostesses. The President, Mrs. S. C. Fulmer, presided at the business meeting. Mrs. Paul Fulmer reported \$79.20 profits from a book review and rummage sale for the Student Loan Fund. Mrs. W. A. Lamb, public relations chairman, reported on the cancer control movement. Mrs. C. E. Oates read a revised constitution and by-laws. Mrs. H. A. Higgins reported 69 garments made for the Arkansas Children's Home and Hospital. Mrs. Carl Rosenbaum reported two members. Plans were completed for the state convention to be held in April.

Only a few more weeks and the members of the Woman's Auxiliary to the American Medical Association will be arriving in Cleveland for their annual Convention, June 2-6. Have you made your reservations? If not, send your request, **at once**, to Dr. Edward F. Kieger, Chairman of Committee on Hotels and Housing, 1604 Terminal Tower Building, Cleveland.

Mrs. Charles T. Chamberlain will head the Auxiliary to the Sebastian County Medical Society for the ensuing year. She was elected at a meeting of the Auxiliary, April 7th, at the home of Mrs. W. R. Brooksher, Jr. Other officers elected are: Mrs. Bert Ware, Secretary, who will succeed Mrs. J. S. Southard, and Mrs. J. L. Kellum, Treasurer, who succeeds Mrs. S. P. Stubbs.

The retiring President, Mrs. Everett Foster, automatically becomes Vice-President. The slate of the Nominating Committee was accepted unanimously. The Nominating Committee comprised Mrs. W. R. Brooksher, Jr., Mrs. D. W. Goldstein, and the President, Mrs. Foster.

Mrs. Foster appointed delegates to attend the convention of the Auxiliary of the Arkansas Medical Society to be held in Little Rock, April 14, 15 and 16. The Fort Smith Auxiliary will be represented by Mrs. Charles T. Chamberlain and Mrs. J. S. Southard, and by members serving on the State Auxiliary Medical Board, who are Mrs. W. R. Brooksher, Jr., Mrs. D. W. Goldstein, and Mrs. Sidney J. Wolfermann.

Mrs. I. Fulton Jones, captain for the Auxiliary during the Cancer Control campaign last week, reported that Auxiliary members contributed \$103 to the membership fund.

Members of the Auxiliary present for Wednesday afternoon's meeting were: Mrs. D. W. Goldstein, Mrs.

S. J. Wolfermann, Mrs. Walter Eberle, Mrs. S. P. Stubbs, Mrs. J. L. Kellum, Mrs. Everett Moulton, Mrs. T. P. Foltz, Mrs. Charles T. Chamberlain, and Mrs. W. F. Rose.

MRS. W. F. ROSE,

Publicity Chairman of the Auxiliary of the Sebastian County Medical Society.

The past year is laden with happy memories, and I want to express my appreciation to all of you for having bestowed upon me the honor of serving as your State President for 1940-41.

I want to thank every State Officer and Committee Chairman, all County Presidents, Councilors and every member of the Auxiliary as a whole for their many courtesies.

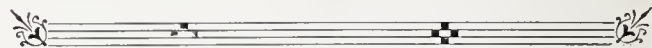
The Advisory Board composed of Dr. A. S. Buchanan, Dr. O. J. T. Johnston and Dr. Everett Moulton, together with Dr. H. T. Smith, President of the Arkansas Medical Society for 1940-41, and Dr. Wm. R. Brooksher, Secretary of the Arkansas Medical Society, have been so kind and considerate in advising us in matters pertaining to Auxiliary work.

I bespeak for Mrs. Calvin Churchill, your splendid incoming President of the Woman's Auxiliary to the Arkansas Medical Society, the same heartfelt cooperation you have given me.

Under the capable leadership of Mrs. Churchill and the fine group of women chosen to serve with her, Arkansas will go forward in Auxiliary work this year.

Sincerely yours,

(Mrs. Alfred) MARY LOUISE HATHCOCK.



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1. Knight, F., and Shelanski, H. A., "Treatment of Acute Anterior Urethritis with Silver Picrate," Am. J. Syph. Gon. & Ven. Dis., 23, 201 (March) 1939.

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JOURNAL OF THE ARKANSAS MEDICAL SOCIETY
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Techniques of Conception Control: By Robert Latou Dickinson, M. D., former president, American Gynecological Society, and Woodbridge Edwards Morris, M. D., General Medical Director, Birth Control Federation of America. Baltimore: The Williams and Wilkins Company, 1941. 50 cents.

A practical manual issued by the Birth Control Federation of America, Inc., with 50 illustrations. Here is a new manual which should be of importance to every physician who is interested in learning more about contraceptive technique. The authors describe and illustrate in clear detail exactly how the preferable conception control devices are to be fitted and how the patient is to be instructed in their usage. Numerous contraceptives are described and evaluated and the harmful ones pointed out. It is by far the best on the subject which I have seen.—M. C. Hawkins, Jr.



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